CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, ENGINEERING SCHOOLS, READERS' WANTS, INDUSTRIAL NOTES, PUBLICATIONS.

Supplement to ENGINEERING NEWS. New York, November 3, 1904.

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PERSONAL.

Mr. Loren B. Walker, for the past 23 years Superintendent of Streets of Clinton, Mass., has resigned that position.

Mr. W. H. Clay, of East Orange, N. J., has been appointed to the engineering force for the Panama Canal construction and will be located at Colon.

Mr. Amer Pierce, a mining engineer in the employ of the Colorado Fuel & Iron Co., and Miss Hattie Gage were married at Fort Collins, Colo., Oct. 26.

Mr. Robert M. Sears, a civil engineer of Springfield, Mass., and Miss Grace E. Hooper were married at the bride's home in Walpole, N. H., Oct. 25.

Mr. J. A. Kirby has resigned as Superintendent of the Daly-West Mining Co., at Park City, Utah, and will in the future act as consulting engineer for the company.

Mr. J. C. Christy, Resident Engineer of the Gulf, Colorado & Santa Fe Ry., at Temple, Tex., has resigned and is succeeded temporarily by Mr. M. T. Pratt, heretofore Assistant Engineer.

Mr. Oscar F. Lackey has resigned as Chief Engineer of the El Cobre Mines of Santiago De Cuba to accept the position of Assistant Engineer in the office of the Harbor Engineer, Baltimore, Md.

Mr. Burt E. Forbes and Miss Gertrude Dean were married at Lincoln, Neb., Oct. 19. Mr. Forbes is a civil engineer in the employ of the U. S. Geological Survey and is at present located at Wadsworth, Nev.

Mr. A. M. McDonald has resigned as Superintendent of the Ida Mitchell Mine, at Placerville, Cal., and has accepted a position with the Debris Commission as Chief Engineer, with headquarters at San Francisco, Cal.

Mr. J. A. Turner, hitherto Superintendent of the Southern Division of the Cincinnati, Hamilton & Dayton R. R., has been promoted to the General Superintendency, to succeed Mr. Ralph B. Turner, who has resigned owing to ill health.

Mr. William E. Putman and Miss Edith H. Ellison were married at Worcester, Mass., Oct. 20, 1904. Mr. Putman is a civil engineer in the employ of Ford, Bacon & Davis, Engineers, of New York, and at present is located at Birmingham, Ala.

Mr. F. M. Whyte, heretofore Mechanical Engineer of the New York Central & Hudson River R. R., has been appointed General Mechanical Engineer and will have jurisdiction over the Boston & Albany, the Lake Shore & Michigan Southern and the Lake Erie & Western. Mr. Whyte will continue to have his headquarters in New York City.

Mr. O. C. Gayley has been elected Second Vice-President of the Pressed Steel Car Co. and will have charge of the sales department of the company, the office of Manager of Sales, Eastern District, being abolished. Mr. Gayley's jurisdiction extends over the entire field covered by representatives of the Pressed Steel Car Co. and the various sales managers report directly to him instead of to the President, as heretofore.

OBITUARY.

Edward Reinhold de Grain, of Washington, D. C., a mechanical engineer in the employ of the Baltimore & Ohio R. R., died of appendicitis at Garret, Ind., Oct. 25. Mr. Grain was a graduate of Cornell University in the class of 1903, and was 26 years old.

Bertrand B. Abry, electrical engineer with the Westinghouse Electric & Mfg. Co., died of typhoid fever on Oct. 31, 1904, at Wilkinsburg, Pa. Mr. Abry, a graduate of the University of Illinois, had been with the Westinghouse Co. for three years past, during the last two years of which he has been connected with the Railway Department. He was 26 years old at the time of his death.

John W. Flaherty, a well known contractor of Brooklyn, N. Y., died at his home in that city Oct. 26 from Bright's disease. Mr. Flaherty was Commissioner of City Works of Brooklyn in 1876, and in 1879 was candidate for Mayor on the Reformed Democratic ticket. He was 72 years old.

Robert James Laws, Superintendent of the Sacramento Division of the Southern Pacific Ry., died suddenly, Oct. 20, while directing the clearing of a wreck near Yuba Pass, Cal. Mr. Laws began his railroad service in 1868 as a rodman in the engineering department of the Central Pacific. Later he became Assistant to the Resident Engineer and Roadmaster. In 1880 he was appointed Superintendent of construction on the Carson & Colorado, and the following year was promoted to be Assistant General Superintendent and Chief Engineer. In March, 1900, he went to Hawthorne, Nev., as Division Superintendent of the Southern Pacific, and was later transferred to Sacramento.

ENGINEERING SOCIETIES.

COMING MEETINGS.

SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS.
Nov. 17 and 18, 1904. Annual meeting at New York, N. Y. Secy., Wm. J. Baxter, 12 West 31st St., New York.

ENGINE BUILDERS' ASSOCIATION OF THE UNITED STATES.
Dec. 2, 3, 1904. Annual meeting at New York, N. Y. Secy., D. Fleming, Harrisburg, Pa.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 6, 1904. Annual meeting at New York City. Secy., F. R. Hutton, 12 West 31st St., New York.

AMERICAN INSTITUTE OF ARCHITECTS.
Dec. 15 to 17, 1904. Annual meeting at Washington, D. C. Secy., Glenn Brown, Washington, D. C.

HONOLULU ENGINEERING ASSOCIATION.—At a meeting held on Sept. 19 at the hall of the Honolulu Symphony Society, the following were elected as officers for the coming six months: Chairman, Mr. A. Gartley; Vice-Chairman, Mr. J. H. Howland; Secretary, Mr. M. Campbell; Treasurer, Mr. T. H. Petrie; Directors, Mr. W. E. Rowell, Mr. Geo. Russell and Mr. E. Kopke. A social hour and light refreshments followed the business meeting.

NEW ENGLAND WATER-WORKS ASSOCIATION.—The program for the November meeting of the association includes two papers: "The East Providence Water Tank and Tower," by Mr. F. M. Bowman, and "Repairs to the Lining of a Reservoir at Chelsea, Mass.," by Mr. C. M. Saville. The Committee on Meter Rates will present its report. The meeting will be held at the association's headquarters in Tremont Temple, Boston, beginning at 2 p. m. of Wednesday, Nov. 9. The headquarters will be open for the use of members as early as 10 a. m. Secy., Willard Kent, Narragansett Pier, R. I.

ASSOCIATION OF MAINTENANCE OF WAY MASTER PAINTERS.—This new organization, formed at a meeting held less than a year ago, will have its first annual convention on Nov. 29 and 30, 1904, at New York City. All persons interested in maintenance-of-way painting are invited to attend. The sessions of the convention will be at the Marlborough Hotel, 36th St. and Broadway, which is also the headquarters during the meeting. The convention will be called to order at 10 a. m. of Tuesday, Nov. 29. The program comprises technical papers as follows:

"How Best to Keep Signal-Blades Clean and Bright," by Mr. J. J. Miller, of Paris, Tenn., and Mr. C. J. Bogardus, of Elmira, N. Y.; "What Is the Best Protective Coating for Track Tanks?" by Mr. J. Murphy, of Minneapolis, Minn.; "What Constitutes a Well-Organized and Equipped Force of Maintenance-of-Way Painters?" by Mr. A. B. Phelps, of Cleveland, O.; "The Best Treatment for Signals," by Mr. M. H. Higinbothem, of Baltimore, Md., and "The Best Method for Painting Iron Bridges," by Mr. W. B. Scott, of Wilmington, Del. The secretary of the society is Mr. H. J. Schnell, 100 William St., New York City.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—The regular meeting for October was held at the Chemists' Club, 108 West 55th St., New York City, on the evening of Oct. 29. A paper was read by Mr. James Dixon on the subject "The Telautograph," and one by Mr. F. F. Fowle on "The Transposition of Electrical Conductors." The first paper mentioned the development of the present-day telautograph from the original step-by-step instrument of Professor Elisha Gray, and described the modern instrument in detail. Its reliability of action and its hardy nature were demonstrated by several instruments shown in actual operation. The instruments are built in a special type for use in coast fortifications, where they are employed to send range information to the individual guns. This type of telautograph is enclosed in a watertight brass case suspended by springs from the gun-carriage. This is found to be sufficient protection against derangement from the shock of discharge of the gun. The second paper presented a very extended mathematical development of the phenomena of mutual induction between different circuits on the same pole line, and then showed various transposition arrangements, actual and possible, for telephone circuits and mixed circuits. The paper was discussed briefly by Professors Franklin and Crehore and Mr. C. O. Mailloux.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—At the annual meeting, which will take place in New York City on Dec. 6 to 9, the following papers will be presented: "A New Hydraulic Experiment," by Mr. A. F. Nagle; "A Twist-Drill Dynamometer," by Messrs. W. W. Bird and H. P. Fairfield; "Diamond Tools," by Mr. G. C. Henning; "Centrifugal Fans," by Mr. A. J. Bowie, Jr.; "Computation of Values of Water Powers and Damages Caused by Diversion of Water Used for Power," by Mr. C. T. Main; "An Indicating Steam-Meter," by Mr. C. E. Sargent; "Stay-Bolts, Braces and Flat Surfaces," by Mr. R. S. Hale; "Condensers for Steam Turbines," by Mr. G. I. Rockwood; "Bursting of Four-foot Flywheels," by Prof. C. H. Benjamin; "Influence of the Connecting-Rod Upon Engine Forces," by Mr. S. A. Moss; "Losses in Non-Condensing Engines," by Mr. J. B. Stanwood; "Power Plant of Tall Office Buildings," by Mr. S. H. Bunnell; "Pressures and Temperatures in Free Expansion," by Messrs. A. Bordody and R. C. Cairncross; "Fuel Consumption of Locomotives," by Mr. G. R. Henderson; "Road Tests of Brooks' Passenger Locomotives," by Mr. E. A. Hitchcock; "Discharge of Water with Steam from Water Tube Boilers," by Mr. A. Bement; "Determining the Efficiency of Steam Generating Apparatus," by Mr. A. Bement, and "Forcing Capacity of Fire Tube Boilers," by Mr. F. W. Dean.

This meeting includes also the election of officers for the next year. The following list of nominees has been drawn up by the Nominating Committee: For President, Mr. John R. Freeman, of Providence, R. I.; for Vice-Presidents, Messrs. S. M. Vauclain, of Philadelphia, Pa., H. H. Westinghouse, of Pittsburg, Pa., and F. W. Taylor, of Philadelphia, Pa.; for Managers, Messrs. G. M. Brill, of Chicago, Ill., F. J. Miller, of New York, N. Y., and R. H. Rice, of Lynn, Mass.; for Treasurer, Mr. W. H. Wiley, of New York, N. Y.

The opening session and the address of the president take place at the society's house on the evening of Dec. 6, while the first regular session opens at Mendelssohn Union, 113 West 40th St., New York, at 9.30 a. m. of Wednesday, Dec. 7.

NEW YORK ELECTRICAL SOCIETY.—An unusually interesting program occupied the October meeting of the society, held at 19 West 44th St., New York City, on Oct. 26. President F. J. Sprague, in the chair, opened the meeting with a brief survey of tendencies in electric railway work, and then introduced Prof. A. S. McAllister, the speaker of the evening, whose subject was "The Alternating-Current Railway Motor." Prof. McAllister confined himself to the series single-phase motor, of which type he showed numerous forms in diagram. The action of the series motor was analyzed into transformer action and speed action, with reference to the generation of counter-potential in the armature. After showing diagrams of the simple series motor, the methods of compensating (for the transformer action) by using a cross coil, either short-circuited (induction compensation) or in series with the motor circuit (forced compensation), were illustrated and their voltage diagrams explained. The speaker then showed a form of motor in which both field and compensating coils are short-circuited, in series with each other, while the line current passes through the armature only. This form was devised by Prof. McAllister a short time ago and has been patented by him. It gives results slightly better than the series motor with forced compensation. The repulsion motor (fields in line circuit and armature short-circuited) was also shown.

In discussion, Mr. A. H. Armstrong told briefly the history of work on alternating-current railway motors by the General Electric Co. In the early 90's this company experimented with the polyphase induction motor, and after lengthy trials decided that it was unsuitable for railway work. The repulsion motor was then tried, with the general conclusion that its field of service is in suburban work. As, however, suburban traction will usually require running on direct-current lines within cities, the series motor was taken up, giving about the same results as the repulsion motor, with the additional advantage of being able to run on direct current.

Mr. Charles F. Scott told of the work of the Westinghouse Electric & Mfg. Co. in the same field. The polyphase induction motor was under trial from 1880 to the beginning of the 90's, when the series motor received some attention. The development of the latter machine was slow, being hampered by high frequencies in commercial use, until it reached a practicable stage some three or four years ago. At present the company has on order and is building no less than 186 motors of this kind, aggregating 11,400 HP., in capacities of 50 to 150 HP. The railway lines for which these motors are intended aggregate about 200 miles in length; the Indianapolis-Cincinnati line (57 miles) is the longest of them. The trolley voltages vary from 1,100 to 3,300 outside and 400 to 700 volts inside of cities. The cars weigh from 25 to 50 tons, and the greatest speed on any of the lines will be 60 miles per hour. Motors of this type have been built and tested up to 300 HP., and the company believes they can be built up to 400 HP. Mr. Scott forecasted extensive changes in electric railway practice as a result of the new motor. He believes that a new type of overhead construction, possibly the longitudinal catenary suspension, will of necessity come into use, on account of the higher trolley voltages; that more closely spaced substations will be adopted; that the car equipment will be radically changed by the substitution of the induction regulator for rheostatic controllers, etc.

Mr. H. A. Lardner presented some of the considerations which speak against alternating-current railways in many cases. The saving in charge for attendance at substations, which is the principal item of saving in operating cost of alternating-current, will be realized only in small part, since a large part of this attendance in a railway system of any extent is utilized for ticket-selling, baggage handling, etc. Again, the reduction in losses due to higher line voltage is partly offset by greater rail resistance, lower car efficiency, etc. Then, a greater car weight, by a material percentage, must be moved. These items also add to first cost: more expensive car equipment, more expensive line construction with higher voltage, etc. The greater danger of shock from handrails, etc., accidentally charged by the high-tension current must also be considered, especially as suitable preventive means involve increased cost. In conclusion Mr. C. O. Mailloux gave some notes of a recent visit to Europe.

CIVIL SERVICE EXAMINATIONS FOR TECHNICAL POSITIONS.

IRRIGATION ENGINEER.—U. S. Civil Service Commission, from whom further information can be obtained, will hold an examination Nov. 22-23 at various places throughout the country, to secure eligibles to fill vacancies as they may occur in the position of irrigation engineer in connection with the irrigation and drainage investigations in the Office of Experiment Stations, Department of Agriculture. The initial salary will be from $1,500 to $2,000 per annum, according to qualifications.

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
Nov.				
3	Coal handling pl't	N. Orl'ns, La.	S	10-20
*4	Harbor work	Chicago, Ill	S	10-13
12	Bridge, steel	Calgary, Alta	S	10-20
12	Timber piers	Washington, D. C.	S	10-27
12	Pile & timber wharf	Wash., D.C.	S	10-27
15	Roads	Harrisburg, Pa	S	11- 3
15	Bridges	Harrisburg, Pa	S	11- 3
19	Retaining wall	Wash., D. C.	S	10-27
Dec.				
*1	Bridge	Manila, P. I.	P., S. & B. S.	7-28

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Nov. 3. Light franchise, Catlettsburg, Ky.....Oct. 20
Nov. 5. Electric lighting, Warren, Pa.....Oct. 27
Nov. 26. Street lighting, Evansville, Ind.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 6. Electric lights, plant, etc., Dallas, Tex...Oct. 27
Advertised, Eng. News, Oct. 27 and Nov. 3.

BRIDGES.

Nov. 4. Bridges, Pawnee City, Neb.....Oct. 27
Nov. 4. Bridge, New Orleans, La.....Sept. 15
Advertised, Eng. News, Sept. 15 to Oct. 7.
Nov. 5. Bridge, abutments, Fremont, O.....Oct. 27
Nov. 5. Bridge, concrete, Pittsfield, Mass.....Nov. 3
Nov. 7. Bridges, Redwood City, Cal.....Oct. 27
Nov. 7. Bridges, Delphi, Ind.....Oct. 27
Nov. 7. Bridge, Rome, Ga.....Oct. 27
Nov. 7. Bridge, Watsonville, Cal.....Oct. 27
Nov. 7. Bridges, Richmond, Ind.....Oct. 13
Nov. 7. Bridge, Noblesville, Ind.....Oct. 20
Nov. 7. Bridge, pile, Rensselaer, Ind.....Nov. 3
Nov. 8. Bridge substructure, Ottawa, Ont.....Oct. 27
Nov. 8. Bridge, steel, Statenville, Ga.....Oct. 27
Nov. 9. Bridges, steel, Mt. Vernon, Ind.....Oct. 27
Nov. 9. Bridge, steel, Stockton, Cal.....Oct. 20
Nov. 9. Bridges, steel, Cleveland, O.....Oct. 20
Nov. 9. Bridge, North Yakima, Wash.....Nov. 3
Nov. 10. Bridge, Fresno, Cal.....Nov. 3
Nov. 11. Bridge, steel, Little Falls, Minn.....Oct. 27
Nov. 12. Bridge, Calgary, Alta.....Oct. 20
Advertised, Eng. News, Oct. 20 and 27.
Nov. 14. Bridges, Terre Haute, Ind.....Nov. 3
Nov. 14. Bridges, steel, Belair, Md.....Nov. 3
Nov. 15. Bridges, Harrisburg, Pa.....Nov. 3
Nov. 15. Bridges, iron, Chillicothe, Mo.....Nov. 3
Nov. 15. Bridges, steel, Monroe, La.....Oct. 20
Nov. 15. Bridges, Tipton, Ia.....Oct. 13
Nov. 15. Bridge, Winnipeg, Man.....Oct. 6
Nov. 16. Bridges, Fairbury, Neb.....Oct. 20
Nov. 17. Bridges, steel, Evansville, Ind.....Oct. 27
Nov. 21. Bridge, repair, Binghamton, N. Y.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Nov. 25. Bridge, superstructure, Cincinnati, O....Nov. 3
Dec. 1. Bridge superstructure, Manila, P. I.....July 28
Advertised, Eng. News, July 28 to Dec. 1.
Dec. 5. Bridge, Dillon, Mont.....Oct. 20
Dec. 7. Bridges, Eau Claire, Wis.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.

BUILDINGS.

Nov. 3. Steam heating, New York, N. Y.....Oct. 27
Nov. 3. Electric wiring, Athens, Ga.....Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Nov. 7. Court house, Dothan, Ala.....Oct. 13
Nov. 7. Ventilating apparatus, Washington, D. C. Sept. 15
Nov. 7. Post office, Lawrence, Kan.....Oct. 6
Advertised, Eng. News, Oct. 6 and 13.
Nov. 7. School work, New York, N. Y.....Nov. 3
Nov. 8. Hospital, Lancaster, O.....Oct. 20
Nov. 9. Post office, Flint, Mich.....Oct. 6
Nov. 9. Building repairs, New York, N. Y.....Oct. 27
Nov. 9. Fort work, San Francisco, Cal.....Nov. 3
Nov. 10. Building, Omaha, Neb.....Oct. 27
Nov. 10. Laboratory buildings, Washington, D. C. Sept. 22
Advertised, Eng. News, Sept. 22 to Nov. 3.
Nov. 10. Removing buildings, St. Louis, Mo.....Oct. 20
Advertised, Eng. News, Oct. 20.
Nov. 14. Post office, Adrian, Mich.....Oct. 13
Nov. 14. City hall annex, New Orleans, La.....Oct. 20
Nov. 14. Freight shed, Stockton, Cal.....Oct. 27
Nov. 14. School, Cincinnati, O.....Nov. 3
Nov. 15. Steam heating, Kirksville, Mo.....Oct. 20
Nov. 16. Hospital, San Francisco, Cal.....Oct. 27
Nov. 16. School, Cleveland, O.....Nov. 3
Nov. 17. Steam heating, Athens, Ga.....Oct. 27
Nov. 17. Army building, Ft. Meade, S. Dak.....Oct. 20
Advertised, Eng. News, Oct. 20 to Nov. 10.
Nov. 17. Hospital buildings, Schenectady, N. Y...Oct. 6
Nov. 21. Post office, Ottawa, Ill.....Oct. 20
Nov. 22. Post office, Georgetown, S. C.....Oct. 20
Nov. 24. Post office, Hoquiam, Wash.....Nov. 3
Nov. 29. Repair shop, Ft. Totten, N. Y.....Nov. 3
Advertised, Eng. News, Nov. 3 to 24.
Nov. 30. Post office, Anderson, Ind.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 1. Light-house, Tompkinsville, N. Y.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 12. Court house, Providence, R. I.....Nov. 3
Dec. 14. Post office, Biloxi, Miss.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 15. Post office, Norristown, Pa.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Dec. 17. Library, Denver, Colo.....Nov. 3
Dec. 29. Hotel, Victoria, B. C.....Nov. 3

WATER SUPPLY AND IRRIGATION.

Nov. 7. Tank and tower, Waterman, Ill.....Oct. 20
Advertised, Eng. News, Oct. 20.
Nov. 7. Pipe, Santa Barbara, Cal.....Nov. 3
Nov. 7. Pumping engine, La Salle, Ill.....Nov. 3
Nov. 9. Artesian well, North Yakima, Wash.....Nov. 3
Nov. 9. Pumping machinery, New Orleans, La....Sept. 1
Advertised, Eng. News, Sept. 1 to Nov. 10.
Nov. 9. Water-works, Mountain View, Cal.....Oct. 27
Nov. 10. Brick arch, Marion, O.....Nov. 3
Nov. 14. Air compressor, etc., Los Angeles, Cal..Nov. 3
Nov. 15. Water system, Ashland, Wis.....Oct. 27
Nov. 16. Reservoir, etc., Fort Wright, Wash.....Oct. 27
Nov. 17. Pumping engines, Chicago, Ill.....Sept. 22
Advertised, Eng. News, Sept. 22 to Nov. 17.
Nov. 23. Hydrants, New York, N. Y.....Sept. 29
Dec. 1. Air compressor, Washington, Ia.....Nov. 3
Dec. 20. Pipe, Toronto, Ont.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
No date. Well, Central Valley, N. Y.....Oct. 13
Advertised, Eng. News, Oct. 13.

SEWERAGE.

Nov. 4. Sewer work, Jacksonville, Fla.....Oct. 27
Nov. 4. Sewers, Cincinnati, O.....Oct. 27
Nov. 4. Sewers, Omaha, Neb.....Oct. 27
Nov. 4. Sewer pipe, Salem, Mass.....Oct. 20
Advertised, Eng. News, Oct. 20 and 27.
Nov. 4. Sewers, Cincinnati, O.....Nov. 3
Nov. 4. Sewer, Passaic, N. J.....Nov. 3
Nov. 7. Sewer, Warren, O.....Nov. 3
Nov. 7. Sewer, Lincoln, Ill.....Nov. 3
Nov. 7. Sewers, Brainerd, Minn.....Nov. 3
Nov. 7. Sewers, Wichita, Kan.....Nov. 3
Nov. 7. Sewer, St. Paul, Minn.....Nov. 3
Nov. 7. Sewer, Kalispell, Mont.....Nov. 3
Nov. 7. Sewer, Creston, Ia.....Nov. 3
Nov. 7. Sewers, Jersey City, N. J.....Nov. 3
Nov. 5. Sewer, Watertown, Wis.....Oct. 27
Nov. 7. Sewers, McKees Rocks, Pa.....Oct. 27
Nov. 7. Sewer, Perth Amboy, N. J.....Oct. 27
Nov. 8. Sewage plant, Ft. Bayard, N. Mex....Nov. 3
Nov. 8. Sewers, steel pipe, Toronto, Ont.....Nov. 3
Nov. 8. Sewer pipe, etc., Winnipeg, Man.....Nov. 3
Nov. 9. Sewers, Mansfield, O.....Nov. 3
Nov. 10. Sewers, Marion, O.....Nov. 3
Nov. 10. Sewer repairs, Ft. Howard, Md.....Nov. 3
Nov. 15. Tile, Sibley, Ia.....Nov. 3
Nov. 21. Sewers, Cincinnati, O.....Nov. 3
Nov. 22. Sewer system, Griffin, Ga.....Nov. 3
Advertised, Eng. News, Nov. 3 to 17.
Nov. 23. Sewers, Cincinnati, O.....Nov. 3
Dec. 1. Sewers, Havre de Grace, Md.....Nov. 3
Advertised Eng. News, Nov. 3 to 17.
Dec. 2. Sewers, Omaha, Neb.....Oct. 13

STREETS AND ROADS.

Nov. 3. Paving, Montooth, Pa.....Oct. 27
Nov. 3. Paving, brick, Cleveland, O.....Oct. 27
Nov. 3. Roadway, etc., Brooklyn, N. Y.....Oct. 27
Nov. 4. Paving, asphalt, Hamilton, O.....Oct. 27
Nov. 4. Paving, asphalt, Troy, N. Y.....
Nov. 4. Paving, Wellsville, O.....
Nov. 7. Paving, Conemaugh, Pa.....
Nov. 7. Sidewalks, Montgomery, Ala.....
Nov. 7. Bridge, Fargo, N. Dak.....
Nov. 7. Paving, vitrified brick, Des Moines, Ia.....
Nov. 7. Paving, brick, Webb City, Mo.....
Advertised, Eng. News, Oct. 27.
Nov. 7. Paving, Atlanta, Ga.....
Nov. 7. Roads, English, Ind.....
Nov. 8. Grading, Washington, D. C.....
Nov. 8. Paving and grading, McKeesport, Pa.....
Nov. 8. Road, macadam, Fort Myer, Va.....
Nov. 8. Paving, etc., Huntington, Ind.....
Nov. 9. Paving, tar macadam, Cleveland, O.....
Nov. 9. Grading, Cincinnati, O.....
Nov. 10. Roadway, Brooklyn, N. Y.....
Nov. 10. Repair, Lowesville, O.....
Nov. 10. Road, Durango, Colo.....
Nov. 10. Road, Brazil, Ind.....
Nov. 12. Road, Bakersfield, Cal.....
Nov. 14. Street, Indianapolis, Ind.....
Nov. 15. Road, gravel, Toms River, N. J.....
Nov. 15. Roads, Harrisburg, Pa.....
Nov. 15. Paving, vitrified brick, Liberty Center, O.....
Nov. 15. Bridges, Eureka, Cal.....
Nov. 16. Sidewalks, Marion, O.....
Nov. 18. Roads, Toledo, O.....
Nov. 18. Macadamizing, St. Bernard, O.....
Nov. 21. Paving, asphalt, Binghamton, N. Y.....
Advertised, Eng. News, Nov. 3 and 10.
Nov. 22. Macadamizing, Somerville, N. J.....
Nov. 22. Grading, etc., Green Bay, Wis.....
Dec. 1. Sidewalks, Keokuk, Ia.....
No date. Grading, Cincinnati, O.....
Advertised, Eng. News, Oct. 27.

MISCELLANEOUS CONTRACTS.

Nov. 3. Boilers, etc., New York, N. Y.....Oct. 20
Nov. 4. Harbor work, Chicago, Ill.....Oct. 6
Advertised, Eng. News, Oct. 6 to Nov. 3.
Nov. 4. Breakwater, Ottawa, Ont.....Nov. 3
Nov. 7. Pipe scow, Philadelphia, Pa.....Oct. 13
Advertised Engineering News, Oct. 13 to Nov. 10.
Nov. 7. Air compressor, Montgomery, Ala.....Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Nov. 7. Fire hose, etc., Philippines.....Oct. 27
Nov. 7. Night soil removal, New York, N. Y....Oct. 27
Nov. 8. Machine tools, Washington, D. C.....Oct. 13
Nov. 8. Electric blowers, wire, etc., Wash. D. C..Oct. 20
Nov. 9. Drainage and levee work, New Madrid, Mo Oct. 20
Nov. 9. Wharf, Deschabault, Que.....Oct. 27
Nov. 9. Tile drain, Mt Vernon, Ind.....Oct. 27
Nov. 9. Dredging, Cleveland, O.....Nov. 3
Nov. 10. Docks, moles and forts, Chili.....Aug. 18
Nov. 11. Pneumatic tubes, Montreal, Que.....Oct. 27
Nov. 11. Dredging, New York, N. Y.....Nov. 3
Nov. 12. Fire escapes, Hudson, N. Y.....Oct. 27
Advertised, Eng. News, Oct. 27.
Nov. 12. Timber piers, Washington, D. C.....Oct. 27
Nov. 12. Pile and timber wharf, Washington, D. C. Oct. 27
Nov. 14. Fire hose, Glassport, Pa.....Oct. 27
Nov. 14. Ditch, etc., Bloomfield, Mo.....Oct. 6
Nov. 15. Drain tile, Sibley, Ia.....Oct. 27
Nov. 15. Motor drive outfits, etc., Washington, D.C. Nov. 3
Nov. 16. Wall lockers, Prescott, Ariz.....Oct. 27
Advertised, Eng. News, Oct. 27 to Nov. 17.
Nov. 17. Tunnel, Boston, Mass.....Nov. 3
Advertised, Eng. News, Nov. 3 and 10.
Nov. 19. Retaining wall, Washington, D. C.....Oct. 27
Nov. 19. Steel castings, etc., Washington, D. C...Nov. 3
Nov. 23. Telegraph material, Australia.....Oct. 6
Nov. 26. Steel vessel, Detroit, Mich.....Oct. 20
Nov. 30. Timber, drainage, New Orleans, La.....Sept. 29
Advertised, Eng. News, Sept. 29 to Dec. 1.
Dec. 1. Railway, Somerset Ry.....Nov. 3
Advertised, Eng. News, Nov. 3 to 24.
Dec. 3. Coal handling plant, New Orleans, La....Oct. 20
Dec. 15. Battleship, Washington, D. C.....Sept. 29
Dec. 25. Coal unloading apparatus, Belgium.....Oct. 20
Mar. 31. Electric railway, China.....Oct. 20
Advertised, Eng. News, Oct. 20 to Dec. 20.

Write our advertisers when you intend to buy your supplies and machinery for improvements, or for carrying out your contracts. If you do not find what you want in our advertising pages write us for list of firms, and we will put you in communication with them at once.

RAILWAYS.

BALTIMORE & OHIO.—Patrick Farrell, of Cincinnati, O., was awarded contract for construction of 10-stall roundhouse at Grafton, W. Va. Cost, $40,000.

BUCKHANNON & NORTHERN.—S. D. Brady, Ch. Engr., Parkersburg, W. Va., informs us that work on this road has been suspended since Jan. 1, 1904, and that there is no immediate prospect of resuming construction.

CARSON & COLORADO.—This road extends about 300 miles from Mound House, Nev., to Keeler, Cal., and is owned by the Southern Pacific Ry. It is reported that it is to be converted into a standard-gage line with new equipment and rolling stock. W. Hood, San Francisco, Cal., is Ch. Engr. of S. P.

CHICAGO, ROCK ISLAND & PACIFIC.—Roadbed between St. Joseph, Mo., and Davenport, Ia., and between St. Joseph and Topeka, Kan., will be improved, it is stated, at once. Cost, $2,000,000. W. L. Darling, Chicago, is Ch. Engr.

DALTON & ALAKULSY.—This road, according to Tradesman "Pink Sheet Bulletin," has issued $100,000 of bonds for new equipment. The report comes from Dalton, Ga.

DETROIT SOUTHERN.—Geo. Crocker, Ch. Engr., Springfield, O., writes us that this road has no new lines in contemplation. It has been reported that an extension will be built from Napoleon or Malinto, O., to Adrian, Mich., about 30 miles.

GAINESVILLE MIDLAND.—George J. Baldwin and associates, who recently purchased the old Gainesville, Jefferson and Southern Railway, now known as the Gainesville Midland Ry., are soon to begin the construction of 18 miles of track from Jefferson to Athens, Ga.

KANSAS CITY, OKLAHOMA & GULF.—Milton J. Smith, Ch. Engr., has stated, according to a report, that contracts for 84 miles of construction will be awarded within two months, from Red River to a point on Choctaw, Oklahoma & Gulf Ry. Grading has been begun from Honey Grove, Tex., to the Red River, about 20 miles. Total length of line from Kansas City, Mo., to Houston, Tex., will be 710 miles.

KENTUCKY.—Railroad will be built from Paintsville or Prestonburg, Ky., through Sayersville, Lee City, Hazel Green and Frenchburg to Mount Sterling, according to local report. L. C. May, of Chicago, is said to be at head of company that has organized with $5,000,000 capital.

LOUISIANA.—W. M. Barrow, Baton Rouge, La., Secy. State Railroad Commission, informs us that a joint resolution was passed at last General Assembly proposing an amendment to the state Constitution that provides for the exemption from taxation for a period of ten years from the date of its completion, of all railroads or parts of rail-

roads constructed subsequent to Jan. 1, 1905, and prior to Jan. 1, 1909. "The Constitution adopted in 1898 carried a provision exempting from taxation all railroads built before Jan. 1, 1904, and during that time railroad building in Louisiana was more active than ever before in the history of the state. At the close of the year ending June 30, 1903, there had been more miles of new railroad constructed in Louisiana than in any other state except Oklahoma territory. During the last five years, that is, since the Constitution of 1898 was adopted up to the present time, there have been over a thousand miles of new line constructed in Louisiana." The above-mentioned amendment includes and applies to "all the rights-of-way, roadbed, sidings, rails and other superstructures upon such rights-of-way, roadbed or sidings; and to all depots, station houses, buildings, erections and structures appurtenant to such railroads and the operation of the same, but shall not include the depots, warehouses, station houses and other structures and appurtenances nor the land upon which they are erected at terminal points, and for which franchises have been granted and obtained; whether same remain the property of the present owner or owners, or be transferred or assigned to any corporation or corporations, person or persons whomsoever, and provided further that this exemption shall not apply to double tracks, sidings, switches, depots or other improvements or betterments which may be constructed by railroads now in operation within the state, other than extensions or new lines constructed by such railroads."

LOUISVILLE & NASHVILLE.—This road, it is announced unofficially, will straighten curves and reduce grades on line between Livingston, Ky., and Jellico, Tenn., a distance of about 64 miles. Engineers are said to be at work now between Livingston and Corbin. Bids will be asked for the construction work when their surveys have been run. R. Montfort, Louisville, Ky., is Ch. Engr.

NEW YORK, PENNSYLVANIA & SOUTHWESTERN.—Rogers & Co. have been awarded contract to build this road from Williamsport, Pa., to Binghamton, N. Y. The company was chartered in 1890 under the name of the Binghamton & Southwestern. Work will begin at Wyalusing, Pa. Clarence B. Miller, Asst. Corporation Clerk, State Dept., Harrisburg, Pa., is said to be interested in the new road. Capital, $9,000,000.

OREGON RY. & NAVIGATION CO.—New buildings, for which bids will be asked soon, will be erected at Albina, Ore., it is said. They include a machine shop, 160 × 338 ft., to cost $95,000; a 22-stall addition to the roundhouse, to cost $95,000; a paint shop, 80 × 544 ft., to cost $45,000; transfer tables, 80 × 773 ft., to cost $26,000; coal chutes, to cost $5,000, and a storehouse, 80 × 200 ft., to cost $3,000. W. H. Kennedy, Portland, Ore., is Ch. Engr.

SOMERSET RY. CO.—Bids are asked until Dec. 1 for the construction of about 9 miles of railway, including track laying, consisting of about 110 acres of clearing, 15 acres grubbing, 70,000 cu. yds. earth excavation, 9,000 cu. yds. loose rock, 12,000 cu. yds. solid rock, 800 ft. pile bridges and 200,000 ft. B. M. timber culverts. W. M. Ayer, Mgr., Oakland; H. F. Hill, Ch. Engr., Bingham. (Advertised, Engineering News.)

SOUTHERN.—Railroad line may be built by this company from Shuqualock, Miss., to Jackson, about 110 miles. Jackson Board of Trade is reported interested. W. H. Wells, Washington, D. C., is Engr. Construction. D. W. Lum, Washington, is Ch. Engr.

Extension from Gainesville to Rome, Ga., is under consideration.

ST. JOSEPH, ALBANY & DES MOINES.—It is reported that E. O. Sessions, Engr., 425 Monadnock Blk., Chicago, is now receiving estimates on grading, ties, poles, rails and freight rolling stock for this company. F. S. Mordaunt, Royal Insurance Bldg., Chicago, is Pres. Road will be operated by steam the entire length from St. Joseph, Mo., to Des Moines, Ia., and by electricity, third rail system, on the divisions from St. Joseph to Albany, Mo., and Wintersett, Ia., to Des Moines, Ia. Buildings will include 19 depots, also power houses, freight houses, machine shops and round houses. Cost, $8,500,000.

WYOMING STATE RY.—F. Chatterton, Governor of Wyoming, is interested in securing right-of-way for this road. It will be built, when funds are secured, from Orin Junction to Lander, Wyo.

NEW INCORPORATIONS AND CHARTERS.

EAGLE VALLEY.—Ore.—W. L. Vinson, John Waterman and P. Basche, of Baker City, Ore., have incorporated Eagle Valley company with capital stock of $1,000,000. Company will build a railroad from Baker City to Richland, in Baker County.

NATCHEZ & GULF.—Miss.—Incorporated to build a line from Natchez to Gulfport, about 160 miles, passing through the counties of Adams, Franklin, Pike, Marion, Pearl River and Harrison. Incorporators are A. G. Campbell, J. N. Carpenter, J. W. Lambert and others.

ROCKDALE, MOMENCE & SOUTHEASTERN.—Ill.—This company, with principal office at Joliet, has been incorporated with capital stock of $10,000. It is proposed to construct a railroad from Rockdale, Will County, to the state line between Illinois and Indiana in Kankakee County. Incorporators are: Fred Bennitt, James Murdock, Frederick A. Jackson, C. E. Robinson and Hugh Mitchell, all of Joliet.

STREET AND ELECTRIC RAILWAYS.

NEW LONDON, CONN.—Daboll & Crandall, Engrs., 94 State St., inform us that the contract for building the East Lyme Street Railway has not been awarded. The engineers also state that while preliminary surveys have been made the plans are not perfected in all details. It was erroneously reported in last issue that contract had been awarded.

NEW YORK, N. Y.—Pennsylvania R. R., which is to equip entire Long Island R. R. system with electric trolley, has let contract to Westinghouse Electric & Mfg. Co., to equip 122 cars with motors. Each car is to have four motors, of 125 HP. each.

SYRACUSE, N. Y.—T. H. Mather, Ch. Engr. Syracuse Construction Co., writes us that the contracts for Sections 4 and 5, from Palmyra to Newark, of the Rochester, Syracuse & Eastern Railroad, has been let to J. G. White & Co., 49 Exchange Pl., New York. Mr. Mather also informs us that grading is in progress on Section No. 1, Rochester to Fairport; contractors, Fred. T. Ley & Co., Springfield, Mass., and on Sections 2 and 3, Fairport to Palmyra; contractor, John Shields Construction Co., Madison Ave., New York. Tracklaying will begin early in spring, and the endeavor is to have the road from Rochester to Lyons, 36 miles, in operation by November, 1905.

WATERTOWN, N. Y.—The Chamber of Commerce is trying to establish a belt line system in this city. Henry Lefebre, City, Mgr. Black River Traction Co., is interested.

ATLANTIC CITY, N. J.—The Central Passenger Ry. Co., which built and operated the short line of electric railway on Virginia Ave., between Atlantic Ave. and beach, last summer, is making arrangements to extend the line out Virginia Ave. to Adriatic, along that street to South Carolina Ave., and down the latter thoroughfare to the beach.

SUMMIT, N. J.—The ordinance granting permission to Morris County Traction Co. to build and operate a trolley line from Summit to Elizabeth has been passed on second reading by Board of Freeholders of Union County.

BLOOMSBURG, PA.—The Columbia & Montour Electric Ry. Co. will make a number of improvements to its system. The company will soon build a power plant at Berwick. A 300-HP. engine and a 200-KW. generator will be installed in this plant. The company will also add a 150-KW. rotary converter at sub-station at Willow Grove. The Berwick Belt Street Railway and other new lines will be built by the Columbia & Montour Co. Chas. Bomboy, of Harrisburg, is Ch. Engr.; D. G. Hackett, City, is Mgr.

GREENVILLE, PA.—We are informed that the Borough Council has passed an ordinance granting the Greenville Electric Ry. Co. a 50-year franchise. C. G. Hussey, of Pittsburg, is Pres., and H. M. Adams, of Cleveland, O., is Secy. and Treas.

PARKESBURG, PA.—Town Council has passed an ordinance granting a franchise to Parkesburg & Oxford Electric Ry. Co. The line is to be 14 miles long and will be completed in a year.

MOORFIELD, W. VA.—Preliminary surveys have been made for the proposed standard gage electric freight and passenger railway to be built from Moorfield to Green Spring. J. William Gilkessen, cashier of South Branch Valley Bank, City, is interested.

QUITMAN, GA.—It is reported that an electric railway will be built here. It will be about 1½ miles long, running from South Georgia Railway depot through the town to Pine Park. It will be owned and operated by the town and will be used for hauling freight as well as passengers.

BIRMINGHAM, ALA.—East Lake, a suburb, has granted a franchise to Birmingham Railway, Light & Power Co. for a street car line in that place. The Birmingham company will construct three miles of electric highway in East Lake and will operate the same independent of the city lines. J. P. Ross is Secy.

JACKSON, MISS.—The Mississippi-Indiana Land & Investment Co. will build an electric railroad between Jackson and Vicksburg. Surveys have all been made. It is stated that work will be commenced at once.

NEW ORLEANS, LA.—It is proposed to build an electric road from this city to St. Bernard, 12 miles. Eastern capitalists are backing the project.

MONROE, LA.—Hon. A. A. Forsythe, Mayor, was authorized by City Council to secure an engineer to prepare plans and specifications for a municipal electric street car service. There will be about ten miles of track.

MAYSVILLE, KY.—Hon. Evan Lloyd, of Germantown' Col. John Dulley, Hon. C. L. Sallee and Thomas A. Davis of Maysville, are interested in an electric railway to be built from this city to Germantown via Washington.

TOLEDO, O.—It is reported that a new electric road from Toledo to Bono is to be built soon.

YOUNGSTOWN, O.—Final surveys are being made for route of the Youngstown & Canton Railway and right of way is being secured. The Osborn Engineering Co., of Cleveland, is Engr.

GRAND RAPIDS, MICH.—We are informed that the survey has been made and right of way secured for an electric line from Grand Rapids to Kalamazoo, Plainwell and Otsego, 60 miles in length. It is expected that contracts will soon be let. W. H. Pattenton, of Kalamazoo, Mich., is Pres.

OWOSSO, MICH.—Representatives of the Owosso & Corunna Electric Railway are seeking a franchise from Vernon village and townships to extend the line through Vernon to Durand. A. N. Richardson, City, is Supt.

MT. CLEMENS, MICH.—The Detroit & Bay City Traction Co. has applied for a franchise to run through the city. The application has been referred to a Council Committee.

KALAMAZOO, MICH.—The St. Joe River Traction Co. has been organized with a capital of $750,000 to build an electric line from the Indiana line through Benton Harbor to Kalamazoo.

LITCHFIELD, ILL.—The Litchfield Traction Co. has been incorporated with $5,000 cap. stock. C. B. Munday, Jr., M. J. Buscher and G. L. Settlemire are the incorporators.

ASHLAND, WIS.—The Ashland Street Ry. Co. contemplates extending a line to Washburn. A. Anderson is Ch. Engr.

SOUTH STILLWATER, MINN.—Village Council has granted a franchise to Twin City Rapid Transit Co. to lay its tracks in streets of village connecting with line of company at Stillwater. The line will be about three miles long and must be built within eight months. W. D. Dozier, of Minneapolis, is Ch. Engr.

HANNIBAL, MO.—The preliminary survey on the proposed interurban line between Hannibal and Quincy has been started. J. E. Carter is interested.

MUSKOGEE, IND. T.—Ira L. Reeves, Pres. Muskogee Electric Traction Co., writes us that most of the right of way has been secured for the proposed electric line from Muskogee to Grand River, a distance of ten miles. Contracts have been let to H. M. Byllesby & Co., of Chicago, Ill., to build entire line. About one-half a mile is now graded.

GUTHRIE, OKLA.—John Shartel has been granted a franchise to construct an electric interurban railroad between Guthrie and Oklahoma City. Construction will commence at once.

OKLAHOMA CITY, OKLA.—Articles of incorporation have been filed by Territorial Engineering Co., organized to construct and operate street railways and electric light and gas plants, with principal offices at Oklahoma City. Capital stock, $25,000. The incorporators are G. W. Burke, F. H. Peckham and M. L. Cunningham, of Oklahoma City.

FORT COLLINS, COLO.—City Council has passed an ordinance giving Northern Colorado Electric Ry. Co. the right to build, operate and maintain an electric railway along business streets of the city. The understanding is that engineers will be put in the field at once to run necessary lines and locate the route of proposed railway. The Northern Electric Ry. Co. has secured franchises from Longmont, Berthoud, Loveland, Fort Collins, Windsor and Eaton and from Larimer County, and proposes to build a continuous line through these towns and eventually to extend it to Denver and Cheyenne.

SNOHOMISH, WASH.—The Snohomish & Cherry Valley Electriv Ry. Co. has organized with J. W. Hall as president and E. Lloyd Colburn, secretary. The permanent location of the line will be made at once.

EUGENE, ORE.—T. C. Archer, Ch. Engr. Willamette Valley Electric R. R. Co., has completed preliminary survey for proposed electric roads through this section.

HOOD RIVER, ORE.—C. A. Bell, of the Transfer Co. which has applied to Council for franchise to operate an electric street railway in Hood River, states that the rails, poles, wires, cars and equipment has been secured and as soon as franchise is granted and street work completed, work of construction will begin.

LOS ANGELES, CAL.—W. D. Morrison and others living in the vicinity of 14th and Wilson Sts. have petitioned the Council to offer an electric railroad franchise for sale. The petition asks for a double-track line.

OAKLAND, CAL.—The Oakland Transit, Consolidated, presented a petition to City Council asking for a franchise for a street railway, commencing at junction of Broadway and Piedmont Ave., thence north to 45th St., thence to the right over a private way and ending at intersection of Broadway and College Ave. J. P. Potter is Supt.

NAMPA, IDAHO.—Surveys are being made for the Settlers' Electric Railway to connect this city with Boise. E. H. Dewey, City, is interested.

VANCOUVER, B. C.—The British Columbia Ry. Co. intends to extend its road 1½ miles from Esquimault to George Bridge. J. Buntzen, City, is Gen. Mgr.

LIGHT, HEAT AND POWER PLANTS.

HOLYOKE, MASS.—Board of Aldermen is stated to have appropriated $30,000 for reconstructing and enlarging electric light station.

WEST POINT, N. Y.—A Washington report states that the Secretary of War has rejected all bids for supplying boilers for the new power plant at West Point, on the grounds that there was an apparent discrimination in the specifications in favor of one of the bidders.

NEWARK, N. J.—Public Service Corporation has authorized issuance of $7,250,000 of 5 per cent. 5-year collateral trust bonds for improvements throughout the various systems of the corporation. It is stated that gas and electric light plants will be enlarged and improved.

DU BOIS, PA.—Cascade Coal & Coke Co. is reported to have awarded contracts for equipping power plant at Tyler Mine, near Du Bois, as follows: The Ridgway Dynamo Engine Co., Ridgeway, Pa., two 200-KW. direct-current generators and two 325-HP. McEwen engines; four 150-HP. water tube boilers awarded to Babcock & Wilcox Co.; "Custodis" brick chimney, 5 × 110 ft., awarded to Tatnall Engineering Co., Philadelphia. Tipple, coal bins and coal crushing plant, Heyl & Patterson Co., Pittsburg.

TAMAQUA, PA.—E. W. Dunn, of Wilkesbarre, and Geo. McDonald, of New York, N. Y., are reported to have secured a franchise to construct a $50,000 gas plant.

EBENSBURG, PA.—Viaduct Water Co. has under consideration the erection of a power plant here. P. J. Little, City, and Elmer E. Davis, of Johnstown, are interested in this company.

BELAIR, MD.—James H. Harlaw, Pleasant St., Baltimore, Md., is stated to have been selected as engineer for the power plant at Belair, for the Susquehanna Electric Co. B. Harry Welch, Pres., Philadelphia. Noted on Oct. 20.

WASHINGTON, D. C.—D. H. Burnham & Co., Chicago, Ill., have invited bids until Nov. 5 for a power house, train yards, express building, etc., in connection with Union Station. Stone and steel work, fireproofing and buildings will be electric lighted.

FREDERICKSBURG, VA.—A $25,000 gas plant may be erected by city.

WHEELING, W. VA.—Contract for constructing five miles of gas line extension for the Virginia Oil & Gas Co. was awarded to Louis Sax, Wheeling. Cost, $80,000.

McCORMICK, S. C.—Water-power at "Ring Jaw" shoals may be developed by company now being organized. L. F. Dorn, of Parksville, S. C.; C. M. Knight, of Buffalo, N. Y., and others, are reported interested.

CALHOUN FALLS, S. C.—Dr. S. M. Orr, of Anderson, S. C., and others, have organized a company to develop Bath, Maddox and Glenn shoals on the Savannah River, recently purchased. About 8,000 HP. will be developed and an electric plant built for transmitting power obtained to operate cotton mills and furnishing light and power to adjacent towns, it is stated. About $680,000 will be expended. J. E. Sirrine, Greenville, S. C., is Engr. in charge. Machinery has not been contracted for.

CHESTER, S. C.—Carolina Land & Development Co. has purchased site on the Broad River and will arrange for the development of water-power.

GENESEO, ILL.—Geneseo Electric Light Co. has voted to issue $8,500 bonds for new machinery and boilers.

CLARKSVILLE, GA.—Town will install water-works and an electric light plant next year, it is reported. Estimates, etc., will be received by J. H. Hicks, Mayor.

GRACEVILLE, FLA.—Graceville Electric Light & Water Co. has been incorporated, with $20,000 capital, and privilege of increasing to $100,000, to operate electric light plant and water-works. John M. Calhoun is Pres. and Treas.; M. F. Boone, Vice-Pres., and Robert J. Boone, Secy. and Supt. All are of Marianna, Fla. 10-year franchise for water-works and electric light plant was reported last month as granted to Robert J. Boone.

ST. AUGUSTINE, FLA.—Edwin E. Mandeville, C. H. A. Littleton, of Philadelphia, Pa., and associates, contemplate erecting electric light plant here. Chas. E. Gard, of St. Augustine, may be addressed.

MONTICELLO, FLA.—C. L. Thompson and John M. Henry, Jr., will install electric light plant. They have contract with the town for furnishing light and power.

KNOXVILLE, TENN.—Improvements will be made at plant of Knoxville Gas Co. next year that will cost $50,000. John E. Hood, Secy., may be addressed. A. W. Young is Supt.

COVINGTON, KY.—Council Committee has recommended the employment of J. H. Creaghead, Electrical Engr., to draw plans for a new electric lighting plant. Council will act on the recommendation.

PADUCAH, KY.—H. H. Humphrey, St. Louis, Mo., will be engineer for proposed electric plant. A $20,000 plant will be installed. Address S. A. Fowler, Secy., Bd. Pub. Wks. Previously mentioned.

ABERDEEN, MISS.—Municipal electric light plant will be rebuilt during the next year.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

NEW ALBANY, MISS.—See under Water-Works.

EVANSVILLE, IND.—Bids are asked by the Board of Public Works, until Nov. 26, for lighting the streets, alleys, parks, public places and city buildings, for the period of five years, commencing Aug. 11, 1905. W. Edw. Clarke, Clk. (Advertised, Engineering News.)

FORT WAYNE, IND.—Directors of the Fort Wayne, Van Wert & Lima Electric Ry. Co. have decided to erect a $1,000,000 power plant in this city to supply power for city traction lines, heat and power for local company, and also for interurban lines, as far west as Logansport, Ind.

ST. CLAIR, MICH.—Herbert W. Brown, Cy. Clk., according to a report, wishes information regarding a gas plant. Franchise probably will be granted for construction of one.

LITCHFIELD, ILL.—Council has granted a franchise to Chas. B. Munday, Jr., to construct and maintain an electric light and gas plant in Litchfield.

WINTHROP, MINN.—Bids are asked until 7 p. m., Nov. 5, for purchase of $7,000 of 5 per cent. water-works and electric light bonds. C. A. Schilling, Village Recorder.

WICHITA, KAN.—Council has granted the Citizens' Electric Light, Heat & Power Co. a franchise to erect an electric light and heating plant. H. G. Landis is interested. Work will begin soon.

LINCOLN, NEB.—Contracts for municipal lighting plant have been awarded as follows: Gilbert-Wilkes Co., of Denver, for two generators, $7,490; Western Electric Co., of Chicago, arc lamps, regulators and arc transformers, $6,317; Wagner Electric Manufacturing Co., of Omaha, incandescent lighting transformers, $194; Hoppe Manufacturing Co., Springfield, O., feed water heater, $360; Nebraska Electric Co., of Omaha, pole and line wiring, $33,260; Sunderland Roofing & Supply Co., of Omaha, for boiler feed pumps, $396; Western Electrical Co., of Chicago, switchboards for 4,400 volts, $1,500; Western Electric Co., for Cutter's pump suspensions, $212; Capital City Brick & Pipe Co., of Lincoln, was awarded contract for power house and chimney, at $13,138 and $6.00 per cu. yd. for machinery foundations, in place.

BRUNSWICK, MO.—H. K. Palmer, Dwight Bldg., Kansas City, will prepare plans and superintend construction of an electric light plant at this place.

HOUSTON, TEX.—Texas Gas Co. has been incorporated, with $100,000 capital, by F. D. Lyon, F. A. Peters and James Beldam.

GUTHRIE, OKLA.—Application for a franchise for 30 years has been made by the Guthrie Electric Light & Power Co., incorporated at $150,000. The new company is to be the successor of the old electric and gas light company and will rebuild entire system, if franchise is granted.

OKLAHOMA CITY, OKLA.—Oklahoma Gas & Electric Co. was reorganized Oct. 20. C. B. Ames, Oklahoma City, was elected Pres., and D. T. Flynn, Oklahoma City, Secy. H. M. Byllesby & Co., Chicago, Ill., were retained as Engrs.

MUSKOGEE, IND. T.—H. M. Byllesby & Co., New York Life Building, Chicago, Ill., we are informed, have been appointed engineers in charge of gas plant, to be constructed here.

SEATTLE, WASH.—The Shoqualmie Falls & White River Power Co., of Seattle and Tacoma, has filed amended articles of incorporation increasing its capitalization to $3,500,000 and changing its name to the Seattle-Tacoma Power Co.

MONTEREY, CAL.—F. Bradford, a director of the Vantana Power Co., according to local paper, states that a power house, boarding house, blacksmith shop, hotel, etc., will be erected by the company on the flat at the mouth of the Big Sur River. Improvements will cost about $200,000.

SAN FRANCISCO, CAL.—Southern Oregon Power Co. has been incorporated. Company is capitalized at $500,000, fully paid up, and is controlled largely by local capital. Jesse W. Churchill, of Yreka, is Pres., and Alexander J. Rosborough, of Oakland, is Secy. Frank H. Ray, of New York, is director. The company will do business in the Rogue River Valley in Southern Oregon. The company will complete project in six months. It will also light the town of Jacksonville.

SAN FRANCISCO, CAL.—Vallejo Gas Co. has been incorporated by G. W. Wilson, S. J. McKnight and others. Capital, $100,000. Place of business, San Francisco.

SAN LEANDRO, CAL.—Mount Diablo Light & Power Co. has been incorporated. Capital stock, $50,000. J. W. Burge, of Haywards; C. A. Jeffery, L. B. Smith and Wilton Shuhaw, of Oakland, and G. J. Clark, of San Leandro, are directors.

BERLIN, ONT.—Berlin & Waterloo Street Ry. Co. will probably build a new power house.

BRIDGES.

PITTSFIELD, MASS.—Bids are asked by Board Public Works until Nov. 5, 1.30 p. m., for building a concrete-steel bridge over west branch of Housatonic River at West St. Plans and specifications may be seen at Engineer's office, City Hall.

BINGHAMTON, N. Y.—Bids are asked until Nov. 21 for repairs of Tompkins St. bridge. D. C. Herrick, Cy. Clk. (Advertised, Engineering News.)

BUFFALO, N. Y.—Bids were opened Oct. 5 for constructing a bascule bridge at Ohio St. and the Pittsburg Steel Co. were low bidders at $117,700. The Scherzer Rolling Lift Bridge Co., of Chicago, before the Committee on Bridges on Oct. 27 offered to build the bridge for $100,000. Put over for one week.

SCHENECTADY, N. Y.—Plans for new lift bridge to be constructed over canal at Union St. have been filed in City Hall by engineers representing New York Central Railroad and Contractor Streeter, who had contract for elevating tracks through the city. City Engineer Fitzgerald will undoubtedly approve them.

ALBANY, N. Y.—The Riverside Bridge Co., of Wheeling, W. Va., was awarded the contract for constructing a steel bridge and approaches over Erie Canal, at Willis Ave., for $10,019. Chas. S. Boyd is Supt. Pub. Wks.

NEWARK, N. J.—Contracts for construction of a bridge across Lehigh Valley Railroad tracks have been awarded by Essex County Park Commission. The bridge will be of steel and concrete, and cost $12,938. Cooper, Wigand, Cooke Co., 152 West 34th St., New York, was awarded the contract for steel work at $7,000. Contract for concrete work was awarded to F. M. Stillman, of Jersey City.

DOYLESTOWN, PA.—County Commissioners have granted permission to Trenton, Newhope & Lambertville Street Ry. Co. to cross Newhope bridge, on condition that company reconstruct the bridge, widening it to 20 ft.

HARRISBURG, PA.—Specifications on file in office of Engineering News, 220 Broadway, New York, for bridges to be used in conjunction with general road specifications for Tioga County. Bids opened Nov. 15.

CHESTER, PA.—James P. Wetherill, City, is interested in a movement to have a bridge constructed over Chester creek at Fifth St. A petition has been signed by a large number of people and will be presented to the court. Bridge builders are asked to send Mr. Wetherill any free literature they may have on their work.

HAZLETON, PA.—A contract has been awarded jointly by Pittsburg & Lake Erie and Baltimore & Ohio Railroads to the American Bridge Co., for construction of a steel bridge over tracks here, of two companies. Cost, $50,000.

DONORA, PA.—It is said that the United States Steel Corporation plans the construction of a bridge over Monongahela River, between Donora and Monessen, for the Donora & Southern Railroad.

BELAIR, MD.—Bids are asked by County Commissioners until Nov. 14 for constructing two steel concrete bridges and abutments. B. F. Hanway, Pres.

MACON, GA.—An ordinance stating that the Central of Georgia Railway should be requested to replace wooden bridge which spans the tracks of that railroad crossing Oglethorpe St., has been introduced in City Council. H. M. Steele, of Savannah, is Ch. Engr.

NEW ORLEANS, LA.—Schwartz Foundry Co. received the contract for repairing six bridges over canals.

CHATTANOOGA, TENN.—The Cape Bridge Co., City, has been awarded the contract for construction of a bridge over Holston River, five miles north of Kingsport, Sullivan County. The bridge is to be 621 ft. long and cost over $15,000.

CINCINNATI, O.—Bids are asked by Board Public Service until Nov. 25 for superstructure of plate girder bridge over Miami and Erie canal at Marshall Ave. Geo. F. Holmes, Clk.

FREMONT, O.—A contract has been placed with Massillon (O.) Bridge Co. for 15 steel bridges by the Patrick Hirsch Construction Co. The bridges will be built on concrete piers. J. H. Clauss is one of the officers of the Hirsch Co.

TOLEDO, O.—Contracts for construction of four county bridges were awarded by County Commissioners. Total cost is $12,105. The contracts were awarded as follows: Stickney Ave. bridge, Massillon Bridge Co., $4,470; Central Ave. bridge, Canton Bridge Co., $3,400; Glanntown bridge, Huston & Cleveland, $3,360; Case bridge, Canton Bridge Co., $1,175. The Stickney and Case structures will have creosoted block floors, while the other two will have oak.

YOUNGSTOWN, O.—The contract has been awarded for a bridge over tracks of Baltimore & Ohio and Pittsburg & Lake Erie railroads at East Youngstown. The American Bridge Co. secured the contract, which was awarded jointly by the two roads, whose grade crossings will be eliminated by it. It will be of steel, and used for pedestrians and vehicles. The contract price is approximately $50,000.

TERRE HAUTE, IND.—Bids are asked by Vigo County Commissioners, until Nov. 14, for construction of three bridges. J. W. Tenehle, County Audr.

RENSSELAER, IND.—Bids are asked by Jasper County Commissioners, until Nov. 7, for construction of a 50-ft. pile bridge.

GRAND RAPIDS, MICH.—City Engineer Anderson has presented estimates to Board Public Works for additional span at Wealthy Ave. bridge, made necessary by widening of river. A concrete arch would cost $19,000 for an 80-ft. span. Using old Bridge St. bridge span would cost $8,900.

PEORIA, ILL.—City Council will pass an ordinance authorizing the construction of bridge to be built jointly by the city and Central Railway Co. Cost, $100,000.

STERLING, ILL.—The removal of four bridges over Rock River has been demanded by War Department as their erection was not by consent of Congress.

EAU CLAIRE, WIS.—Bids are asked until Dec. 7 for a 2-span plate girder bridge, with masonry or concrete substructure, and for a double arch concrete-steel bridge, complete. Plate girders to be 90 ft. over all, arches to be 82 ft. in the clear and both to be 77° skew bridges. J. Hennessey, Cy. Clk. (Advertised, Engineering News.)

RACINE, WIS.—John I. Beggs, Pres. Milwaukee Elec. Ry. & Lt. Co., Milwaukee, has offered to this city about $12,000 toward the cost of repairing and rebuilding two bridges here. The offer will be accepted.

CHILLICOTHE, MO.—Bids are asked by Bridge Commissioner until Nov. 15 for construction of two iron bridges. Plans and specifications may be seen at office of County Clerk. J. Y. Powell, County Surveyor.

OKLAHOMA CITY, OKLA.—The John Gilligan Construction Co. was awarded the contract for building the Walnut St. viaduct for $11,600.

NORTH YAKIMA, WASH.—Bids are asked by County Commissioners, until Nov. 9, for construction of bridge at Zillah, 62 ft. in length. W. B. Newcomb, County Audr.

EUREKA, CAL.—Bids are asked by Board of Supervisors, until Nov. 15, for construction of two bridges over Elk River. Bids for both steel and wooden structures are invited. W. H. Haw, Clk.

FRESNO, CAL.—Bids are asked by Board of Supervisors, until Nov. 10, 2 p. m., for construction of a bridge across Cole Slough, Fresno County. W. O. Miles, County Clk.

SANTA ROSA, CAL.—Commissioners of Sonoma County are considering the replacing of a 1,400 ft. wooden bridge in Alexander Valley by a steel structure consisting of series of 120-ft. steel spans. They also contemplate a bridge over Russian River at Korbel, which will be 500 ft. in length, with approaches. It will probably have steel spans 150 ft. in length. The Board will also take action to replace the bridge over Russian River at Markhamp, this county, which was washed away last winter.

LOS ANGELES, CAL.—City Council has authorized the City Engineer to construct a temporary foot bridge across Los Angeles River at Aliso St.

The Council has rejected all bids for construction of a foot bridge over Los Angeles River at Alhambra St. New bids will be called for, to be opened Nov. 6.

Bids are asked by H. J. Lelande, Cy. Clk., until Nov. 7 for construction of a foot bridge across Los Angeles River at Alhambra Ave.

MOUNT FOREST, ONT.—The County Council have decided to replace the bridge over Speed River, on line between Nichol and Eramosa, with a steel structure.

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BUILDINGS.

PROVIDENCE, R. I.—Bids are asked by S[illegible] Arch., Treasury Dept., Washington, D. C., until [illegible] 12 for general construction of postoffice, court [illegible] custom house at this place.

BROOKLYN, N. Y.—James H. Tully, Charit[illegible] will submit plan to Board of Estimate, it is [illegible] erection of $100,000 hospital at Coney Island.

Bids are being received by Jackson & Ro[illegible] Archs., 31 Union sq., Manhattan Boro., for constr[illegible] Bedford Branch bldg. of Y. M. C. A., at Monro[illegible] Bedford Ave. Brick and stone, steel frame, firep[illegible]

John Fletcher & Son, 54 Park Ave., Brookly[illegible] contract for Y. M. C. A. building, to be erected [illegible] Ave. and South Ninth St. Cost, $200,000. Boring [illegible] ton, 32 Broadway, Manhattan Boro., are Archs.

FORT TOTTEN, N. Y.—Bids are asked until [illegible] for furnishing material and building a brick repair [illegible] Lieut.-Col. W. L. Marshall, Engrs. (Advertised [illegible] neering News.)

NEW YORK, N. Y.—Bids have been received by [illegible] W. Romeyn, 55 Broadway, for a 12-story apartment [illegible] 100 × 115 ft., to be erected at 46-50 Central Park [illegible] Estimated Cost, $650,000. Franklin Haines, Yonk[illegible] owner.

Bids are asked by C. B. J. Snyder, Supt. Schools, until Nov. 7, for sanitary work, installing electric equi[illegible] and alterations in public schools in various borough[illegible]

NEW YORK, N. Y.—Bids are being received by [illegible] man & Fox, Archs., 11 East 59th St., for a 12-story [illegible] ment hotel to be built on 46th St., east of Sixth Av[illegible] for the Langham Realty Co., Geo. M. Mathews, Pres., 21 [illegible] Row. Building will be 55 × 83 ft., of limestone and [illegible] ite; steel frame, steam heat and elevator. Cost, $3[illegible]

Bids will be asked probably within next two weeks for building foundation for Bronx Borough court house at 161st St. and Third Ave.

NEW YORK, N. Y.—Bids were received on Oct. 31 for the erection of a public bath building on east side of Aves., as follows: Kelly & Kelley, 39 East 42d St., $237,500; John T. Brady & Co., 4 East 42d St., $237,840; H. Lippe & Bros., 1788 Fifth Ave., $276,684; Murphy Bros., 489 Fifth Ave., $235,994; Luke A. Burke, 401 West 59th St., $235,000; Waters & O'Connell, 5 East 42d St., $235,000; R. E. Heningham, 4 Court Sq., Brooklyn, $225,000; List, Lennon & Co., 1949 Bway., $249,900; J. C. Vreeland Bldg. Co., 1133 Bway., $233,647; R. J. Mahoney, 1123 Bway, $233,700; Conrad Hewitt, 1123 Bway., $231,000; Thos. Cockerill & Son, 147 Columbus Ave., $227,900; John H. Parker, 225 Fourth Ave., $261,058; Chas. Pokworth, 415 Hudson St., $216,000.

Bids were received on Oct. 31 by C. B. J. Snyder, Supt. School Bldgs., Bd. Education, for general construction of additions and alterations to school 110, Driggs Ave. and Monitor St., Boro. Brooklyn, as follows:

John J. Hearn, 110 West 34th St., $116,479; Lincoln & Ranney, 460 West 41st St., $111,614; T. P. Kelly Sons, 70 East 41st St., $115,300; Wm. Werner, 892½ Forest Ave., $136,489; M. R. Amendinger, Brooklyn, $149,850; Clarke & Stowe, 15th Ave. and 71st St., $127,400; Jno. Thatcher & Son, 45 East 41st st., $124,000; R. E. Heningham, 4 Court Sq., Brooklyn, $119,975; Geo. Hildebrand, 38 Park Row, $116,846; W. P. McGarry, 236 Huron St., $115,443; P. Cleary, 235 Bainbridge St., Brooklyn, $129,975.

SYRACUSE, N. Y.—Syracuse Homeopathic Hospital Board of Trustees have decided to build a $50,000 hospital. This sum is available. Frank C. Soule is Secy.

TOMPKINSVILLE, N. Y.—Bids are asked until Dec. 1 for furnishing the material and labor for the erection and delivery of the Pecks Ledge Light-House, Cockenoe Island, Conn. Bids will also be received for the metal work. Lieut.-Col. Wm. T. Rossell, Corps of Engrs., U. S. A. (Advertised, Engineering News.)

UTICA, N. Y.—Henry Morgenthal and Ernest Ehrmann, of New York, have purchased, according to report, about 5,000 acres of land in vicinity of Blue Mountain, Utowana and Eagle Lakes, in the Adirondacks. The property will be improved and a club house built.

PATERSON, N. J.—New school will be built at cost of $54,000. Aldermanic Board has approved the ordinance.

CAPE MAY, N. J.—Plans are under way for constructing a hotel and also an ocean pier and theater at Cape May. For further details address the Cape May Real Estate Co., 101 Arcade Bldg., Philadelphia.

EASTON, PA.—Additions to dormitories and other improvements contemplated at Lafayette College will cost $2,0,000. E. D. Warfield is Pres.

HOMESTEAD, PA.—St. Michael's Slavonic Congregation will erect $75,000 church on Ninth Ave.

PHILADELPHIA (HOLMESBURG STATION), PA.—County Prison has asked for $75,000 appropriation for new ward.

PHILADELPHIA, PA.—Bids will be received soon by Watson & Hazelton, 305 Dearborn St., Chicago, for a 7-story office and lodge building, to be erected for Society of Colored Odd Fellows. Brick and stone, fireproof construction, steam heat, iron and steel work, combination light fixtures and nickel plumbing. Cost, $200,000.

W. H. Cookman, Arch., has prepared plans for a 6-story building for Adams Express Co., to be erected at 18th and Market Sts. Cost will be about $200,000.

Bids will be received for construction of the following school buildings: For one on Christian St., above Third, at cost of $6,500; Wharton and Sheridan Sts., $82,000; Race and 52d Sts., $75,000; Oak Lane, 50,000; 38th and Warren Sts., $35,000.

Bids will be readvertised for building Home for Indigent, near Torresdale. Estimates were received by David J. Smyth, Dir. Dept. Public Safety, 217 City Hall, on Sept. 2, but all were in excess of $500,000 appropriation. Philip H. Johnson, 1825 Land Title Bldg., is Arch.

PITTSBURG, PA.—Palmer & Hornbostel, 63 William St., New York, have been granted prize and commissioned to prepare plans for Carnegie Technical Schools. There were 44 competitors. The schools, when completed, will cover an area of 32 acres and will cost $5,000,000. Work on the buildings will begin as soon as plans can be prepared.

NORRISTOWN, PA.—Bids are asked by James Knox Taylor, Supervis. Arch., Treas. Dept., Washington, D. C., until Dec. 15 for the construction, complete, of the U. S. Post Office. (Advertised, Engineering News.)

PITTSBURG, PA.—John W. Straub & Co., Pittsburg, will build a 3-story business and apartment block at Frankstown and Braddock Aves., East End. A. E. Linkenheimer, Fourth Ave., City, is Arch. Cost, $40,000.

Contract for steel and construction work of Wabash Ry. freight station was awarded to the McClintic-Marshall Construction Co., Pittsburg. Station will extend from Fourth to First Ave. Cost, approximately, $200,000.

Oscar Brashear, Bernard Gloekler and other business men are reported interested in plan to build a $250,000

Produce Exchange. It would be located on Penn Ave., between 16th and 17th Sts. Six stories high, about 100 × 100 ft., of stone and steel.

WASHINGTON, D. C.—Wm. J. McShane, 1517 South 12th St., Philadelphia, has been awarded contract for Trinity College addition. Stone and steel, four stories, flat roof, 40 × 140 ft.

Richardson & Burgess, Colorado Bldg., have contract for remodeling American National Bank Building, at 1317 F St., N. W. Cost, $40,000.

Timothy L. Lewis, 51 U St., N. W., has invited subbids for all materials required in erection of 30 2-story flat houses, at 11th St. and Sherman Ave., N. W. Cost, $[illegible]000.

NORFOLK, VA.—James Stewart & Co., of New York, have contract for 12-story bank building for Commercial Realty Co., to be erected at Main and Atlantic Sts.

HUNTINGTON, W. VA.—Bids were received for construction of post office here as follows: J. C. Robinson, Chicago, Ill., $129,996 and $132,496; William H. Bailey, Henderson, Ky., $134,440; William Weber, Champagne, Ill., $116,900; A. F. Withrow, Charlestown, W. Va., $[illegible],000; Brady Construction Co., Fairmont, W. Va., $95,-[illegible]; H. L. Kreinsler, Pittsburg, Pa., $168,850; J. G. Unkefer & Co., Johnson City, Tenn., $134,920; General Supply and Construction Co., New York City, $138,977; William P. Lipscomb & Co., Washington, $128,900; Hendrick & Roberts, Philadelphia, Pa., $156,977; William F. Stillwell, Lafayette, Ind., $142,889; J. E. & A. L. Pennock, Philadelphia, Pa., $116,000; Ambrose B. Stannard, New York City, $124,792; Richardson & Burgess, Washington, D. C., $126,623.

G. W. Viedenburg, Richmond, W. Va., has contract, it is reported, for 3-story hospital building to be erected for Dr. A. K. Kessler. Cost, $80,000.

SIMPSON, W. VA.—McIver & Pierl, Builders' Exchange Building, 2 East Lexington St., Baltimore, Md., have contract to erect power house, storehouse, dwellings, etc., for the Maryland Coal Co., Lonaconing, Md. John S. Seibert, Cumberland, Md., is Arch. Cost, $50,000.

CHARLOTTE, N. C.—Southern Ry. Co. has had plans changed for passenger station here. New building will cost $55,000 or $60,000. C. H. Ackert, Washington, D. C., is Gen. Mgr. J. S. B. Thompson, Gen. Agt., at Atlanta, Ga., may be addressed.

PULASKI, TENN.—Martin Female College here was recently burned at a loss of $40,000, with $30,000 insurance. College will be rebuilt.

LOUISVILLE, KY.—Fiscal Court committee has recommended that a $325,000 armory be built at Sixth and Walnut Sts.

FRANKFORT, KY.—Plans for the new capitol at Frankfort have been completed by Frank M. Andrews, the architect, it is reported by "Tradesman Pink Sheet Bulletin." A meeting of the state capitol commission has been called for Nov. 10, when the plans will be examined and arrangements made for advertising for proposals and letting contracts for the work of construction.

BILOXI, MISS.—Bids are asked by James Knox Taylor, Supervis. Arch., Treas. Dept., Washington, D. C., until Dec. 14 for the construction, complete, of the U. S. Post Office, Court House and Custom House. (Advertised, Engineering News.)

MERIDIAN, MISS.—Officials of Meridian Terminal Co. have met to arrange preliminaries for building of union passenger station. A $150,000 building will be erected. Plans have been approved and work probably will begin soon.

JACKSON, MISS.—I. C. Garber, of Jackson, was awarded contract for general construction of Deaf and Dumb Institution here and F. A. Clegg of Louisville, Ky., the contract for heating apparatus. Total cost, $63,064.

LORAIN, O.—Nicola Building Co., of Pittsburg, has been awarded contract by Sheffield Land & Improvement Co., of this city, for erecting 500 modern dwelling houses. They will cost $2,000 each.

CINCINNATI, O.—Bids are asked by Board of Education until noon, Nov. 14, for erection of a 12-room school building, at McAlpin and Clifton Aves. Jacob E. Cormany, Chn. Com. on Buildings.

Henry Klein, Supt. School Bldgs., Bd. Education, 910 Main St., will receive bids for a 3-story school building. Plans are being prepared by Edward H. Dornette, Arch., Pickering Bldg. It will be about 170 × 90 ft., brick, concrete foundations and will cost $85,000.

CLEVELAND, O.—Bids are asked by J. F. Herrick, Clk. Bd. Education, 201 Cuyahoga Bldg., until noon, Nov. 16, for plumbing, gas fitting and sewers, also for the construction of 250 lockers, more or less; for the sheet metal work and for the heating and ventilation in Shaw high school, East Cleveland. Searles & Hirsh, Archs., 308 Electric Bldg., Cleveland.

CLARKSBURG, O.—Main Street Building Co. will erect a 6-story business block and theater here at cost of $80,-000. Leon H. Lempert, Rochester, N. Y., is Arch.

DAYTON, O.—Bids were received for 23d district school on Haynes St. Lowest bids were: For excavation (including stone masonry): Christian Poock, $3,600; cementing, E. A. Kuhns, $1,235; brick work, Chas. Hosket, $12,-450; cut stone, Webster-Whyte Stone Co., $3,000; carpenter work, John Rouzer Co., $12,700; heating, Andrews, Johnson & Co., $7,300; iron work (rough), C. H. Lyon, $8,750; paving, Walter G. Rost, $1,510; plastering, W. J. Kernan, $2,180; plumbing, Staniland & Schneble, $2,422; entire contract (exclusive of gas fitting, electric work, cut stone, plumbing, heating and ventilating), F. C. Smock, $56,444.

ANDERSON, IND.—Bids are asked by James Knox Taylor, Supervis. Arch., Treas. Dept., Washington, D. C., until Nov. 30, for the construction, including plumbing, heating apparatus, electric wiring and conduits, of the U. S. Post Office. (Advertised, Engineering News.)

CHICAGO, ILL.—Bids will be received by Theo. Andreen, 1335 Belmont Ave., for a department store, to be erected at Clark and Roscoe Sts., for J. C. Paul, 79 Dearborn St. Two stories and basement, 37 × 82 ft., press brick, iron and steel work, beams, columns, electric light fixtures, etc. Cost, $75,000.

Union Stock Yards Co. has begun preliminary work on a Coliseum in Halstead St., between 43d and 44th Sts. It will be 650 × 225 ft. and it will cost $175,000.

JOLIET, ILL.—Jarvis Hunt, Arch., Monadnock Bldg., Chicago, has plans for a union depot, to be erected here, for the Chicago & Alton Ry., Rock Island, Santa Fe and Michigan Central Companies. It will be of brick, stone and steel. Work probably will not begin until spring.

LAKE GENEVA, WIS.—Holabird & Roche, Archs., Monadnock Bldg., Chicago, Ill., will receive bids for a residence, to be erected for Mr. Wells at this place, it is stated. To be two stories, basement and finished attic, built of rough cast plaster, shingle roof, grille work. Cost, $40,000.

MINNEAPOLIS, MINN.—E. W. Langdon and C. A. P. Turner, associated, 816 Phoenix Block, have plans for armory building to be erected on Lyndale and Hennepin Aves. It will be three stories, 100 × 165 ft., of press brick and cut stone, steel roof, fireproof steel construction, and will cost probably $150,000.

ST. PAUL, MINN.—It is reported that $250,000 of proposed $500,000 endowment for Macalester College has been raised. R. A. Kirk is Chn. of Endowment Com. New buildings and new equipment for present buildings are required.

ST. LOUIS, MO.—W. B. Ittner, School Comr., has commenced plans for the new Shepard and Shields schools, it is reported. The plans will be submitted to Board of Education for approval, and bids will then be asked for their construction. Cost, $130,000.

HOT SPRINGS, ARK.—R. P. Morrison, 10 Oak St., has plans for a building, 77 × 175 ft., with stores and flats above and laundry in rear for the People's Laundry, bids for construction of which will be received until Nov. 15 by owner.

DENVER, COLO.—Bids are asked by Frank W. Crocker, Chn. Building Com. Library Commission, until Dec. 17, for the construction of the library building. Albert Randolph Ross, Arch., 542 Fifth Ave., New York, N. Y. Copies of drawings and specifications will be furnished to contractors by the architect upon receipt of $20, $10 of which will be refunded on the return of the drawings and specifications.

HOQUIAM, WASH.—Bids are asked until Nov. 24 for building post office, with all necessary fixtures.

SEATTLE, WASH.—Columbia & Puget Sound Co. will build a new depot at Seattle, and will begin work immediately, it is reported. Plans for the structure are nearly completed and when formally approved the company will either call for bids or do the work under the supervision of the sperintendent of bridges and buildings.

James D. Lowman will build a 12-story office building at First Ave. and Cherry St. Work will not begin until May 1, 1905. Emil De Neuf is Arch. Cost will be about $300,000.

Ordinance has been signed by Mayor providing for an election to be held to vote issuance of $150,000 of bonds for new City Hall site and for new City Hall and a new jail.

SEATTLE, WASH.—Capt. F. A. Grant, Q. M., has received bids for repairs at Fort Lawton. Lowest bid was submitted by Walter Bros. & Randall, at $19,200.

LOS ANGELES, CAL.—Dr. Thomas Powell has organized a corporation that proposes to establish a hospital. For the present it will be located at 416 West Fourth St. A new building to cost $250,000 will be erected.

Estimated cost of equipment for new polytechnic high school is placed at $170,000. School is now in course of construction. School Board has matter under consideration.

SAN FRANCISCO, CAL.—We are informed that the proposed new artillery post at The Presidio will involve the construction of seven barracks, 20 or 30 sets of officers' quarters and 10 or 15 storehouses. Until recently nothing had been done regarding the construction. Maj. Jno. P. Wisser is Pres. of the Board, and Col. W. S. Patten, U. S. A., Ch. Q. M., Phellan Bldg., San Francisco, is in charge and decides upon the character of the buildings.

SAN FRANCISCO, CAL.—Bids are asked until Nov. 9, 11 a. m., for completing certain items of construction, plumbing, heating and gasfitting at Fort McDowell, Cal. Wm. S. Patten, Q. M.

War Department has decided upon improving the army posts and stations near San Francisco, involving an outlay of not less than $1,200,000. A new 8-company post near the artillery fortifications, Presidio, and in the vicinity of Fort Winfield Scott, will cost about $1,000,000, according to plans approved and in the hands of the Quartermaster-General. Work is to be commenced as soon as necessary appropriation shall have been obtained.

Herbert E. Law is to erect a 9-story office building, to be known as the Monadnock, at Market and Annie Sts. Cost, $500,000.

An 8-story and basement brick and steel building will be erected on Sansome and Clay Sts., by I. M. Cowell. Plans have been prepared by H. H. Meyers and C. R. Ward. Building will cost about $130,000.

A 6-story and basement brick apartment house is to be erected by the Central Realty Co. on O'Farrell St., near Mason, to cost $75,000. It will contain three stores, 110 rooms and 45 bath rooms.

SANTA CLARA, CAL.—Steps are to be taken, it is said, to raise $1,000,000 for the erection of buildings on the new college site at Mountain View. H. L. Middleton is Chn. of Committee.

VICTORIA, B. C.—Bids are asked until Dec. 29 by Geo. H. Webster, Division Engr., Vancouver, for erecting a 7-story brick and stone hotel here, for the Canadian Pacific Ry. Co. F. M. Rattenburg, Victoria, is Arch.

WATER SUPPLY AND IRRIGATION.

BANGOR, ME.—We are informed that plans and estimates are being prepared by Chas. Davis, representative of New York Continental Filter Co., for alum filters to be applied to the city pumping station on State St., for purifying the drinking water.

FORT ETHAN ALLEN, VT.—Contract for constructing steel tank and trestle here, bids for which were opened Oct. 10, has been let to Cooper, Wigand, Cooke Co., 152 W. 34th St., New York, for $10,960.

DANVERS, MASS.—Water Commissioners have been instructed to purchase, at a cost not to exceed $3,000, a positive stroke pump or any other suitable device, for measuring water.

OXFORD, MASS.—Town has voted to accept act incorporating Oxford Water Co., and has also voted to contract with it for water supply. The company will be organized soon.

REVERE, MASS.—Town has voted to accept the act of the Legislature permitting it to operate its own waterworks, and has voted to purchase the plant of the Revere Water Co.

WATERBURY, CONN.—Board Public Works has asked $50,000 bond issue, with which to establish a system of water meters in all of the houses in the city. Robert A. Cairns is Cy. Engr.

KINGSTON, N. Y.—Contract for construction of waterworks, for county poorhouse at New Paltz, has been let to Frank Rice for $12,240. Work will require 12,078 ft. 6-in. pipe, 1,724 ft. 4-in. pipe, 60 ft. 10-in. pipe, 10 hydrants for 5-ft. trench, 10-in. gate valve, two 6-in. gate valves, 220 yds. masonry, 50 yds. concrete, 10 hydrant branches, 1,065 ft. 1-in. galvanized iron pipe, and 73 ft. ¾-in. galvanized iron pipe.

BERLIN, N. Y.—Berlin Water Co. has been incorporated with $6,000 capital, to supply this place with water. James C. Cowee, Troy, N. Y., and Wm. C. Baxter, Watervliet, N. Y., are interested.

ONEIDA, N. Y.—Construction of new reservoir for municipal water system is under consideration, and E. A. Fisher, Cy. Engr., Rochester, N. Y., is to report on project.

NEW YORK, N. Y.—Contract for constructing steel tank at Fort Jay is stated to have been let to Horace E. Horton for $7,000.

SENECA FALLS, N. Y.—We are informed that matter of municipal water-works will be taken up after election. Fred. Isenman is Village Pres.

SCOTIA, N. Y.—Water supply and sewers are under consideration, and Village President Mynderse has received estimates setting cost of former at $22,000 and of latter at $15,000.

NEW YORK, N. Y.—John T. Oakley, Comr. Water Supply, Gas and Electricity, has rejected all bids received Oct. 12 for furnishing and laying 12,575 tons of water pipe for the new high pressure fire service in Brooklyn. New specifications are to be prepared, the contract being divided into three sections, and the work readvertised.

TRENTON, N. J.—Texarkana Water Corporation has been incorporated with $125,000 capital to construct waterworks, etc. Ephraim Tomlinson, 119 Market St., Camden, was Atty. and Agent. H. Bayard Hodge and Geo. M. Bunting, incorporators.

LONG BRANCH, N. J.—Elberon Water & Light Co. has been incorporated with $150,000 capital, to construct and operate water-works and lighting plants. Raymond S. Dodds and James Loux, Long Branch, are interested.

CHAMBERSBURG, PA.—Committee, Dr. John C. Greenewalt, Member, has been appointed to secure engineer to make preliminary survey looking to establishment of gravity system of water-works.

PHILADELPHIA, PA.—Following bids were received by Bureau Yards and Docks, Oct. 29, for pumping plant and storage tank for artesian well supply at League Island Navy Yard: Jos. L. Sweigard, 1119 Betz Bldg., Philadelphia, Pa., $15,652; Pneumatic Engineering Co., 128 Broadway, New York, N. Y., $13,257; The Snare & Triest Co., 39 Cortlandt St., New York, $17,900; W. M. Anderson, 108 S. 20th St., Philadelphia, Pa., $15,760.

PHILADELPHIA, PA.—Mountain Crest Water Co. has been chartered with $10,000 capital.

DELAWARE CITY, DEL.—Following bids were received by Capt. Louis F. Garrard, Jr., Q. M., U. S. A., for constructing tubular deep well, reservoir, etc., at Fort Du Pont: (1) Tubular deep well, 1 to 800 ft., per lin. ft.; (2) Cook strainer in place, per lin. ft.; (3) reservoir, 30,000 gals.; (4) boiler, 40-HP.; (5) steam pump, duplex, 10 × 6 × 10 ins.; (6) air compressor; (7) air receiver; (8) distilling apparatus. Thomas B. Harper, (1) $4.35, (2) $7; Eastern Well Co., (1) $7.25, (2) $15; J. H. K. Shannahan Artesian Well Co., (1) $7, first 300 ft. $5.50, second 300 ft. $4, next 100 ft. $3; P. H. & J. Conlan, (1) $5, (2) $8; Harry A. Miller, (3) $2,362, (6) $3,988, including all pipes; James L. Sweigand & Co., (6) $7,691, extra well, reservoir and distributing plant; Smedley Construction Co., (3) $1,794; H. C. Clark, (3) $2,367, or all machinery as specified, including reservoir for $10,540; McCay Engineering Co., (5) $11,287, except well; Pneumatic Engineering Co., (6) $2,141, (7) $142; Blaisdell Engineering Co., (6) $2,215, per specifications; Motley, Green & Co., (6) $3,890, (8) $2,300.

WASHINGTON, D. C.—District Commissioners have been requested to sink an artesian well at each one of the 120 schools in the District.

WASHINGTON, D. C.—Isthmian Canal Commission has awarded contract for furnishing valves and hydrants for use in Panama, bids for which were received Oct. 20, to Herron Pump & Foundry Co., Chattanooga, Tenn., for $5,444, to be delivered at Colon.

ALEXANDRIA, VA.—Alexandria Water-Works Co. proposes to improve its system, according to reports.

NORFOLK, VA.—Council Committee, M. Umstadter, Chn., has been considering establishment of central fire pumping station to use salt water for fires.

LEESBURG, VA.—Town is seeking site on which to locate standpipe.

SPARTANSBURG, S. C.—We are informed that Home Water Supply Co. will take bids next spring on its projected filter plant. J. L. Ludlow, Winston, N. C., is Des. Engr. Jesse Cleveland is Treas. of company.

ENSLEY, ALA.—Local parties are considering providing this place with water, supply to be from Warrior River, 16 miles distant, where pumping station would be installed. Mayor N. W. Scott is interested.

GRIFFIN, GA.—See under Sewers.

MAGNOLIA, MISS.—Xavier A. Kramer, Cy. Engr., writes that A. B. Sanders, Shreveport, La., received contract for city water-works, with exception of tank which was let to Chicago Bridge & Iron Works, and pipe which was let to Ahrens & Ott, New Orleans, La. Contract for well is still open and bids on same are desired.

NEW ALBANY, MISS.—We are informed that proposed municipal water and electric plant will require standpipe, 200 tons pipe; heater feed pump, 750,000 gallon duplex pump, 60 KW. single-phase belt driven A. C. 2,300 volt dynamo, and 100 HP. engine. Est. cost of plant is $20,000. Nothing further, however, will be done until bond issue is sold. W. F. & A. D. Wilcox, Jackson, Miss., are Des. Engr.

SILVER CITY, MISS.—Silver City Light & Water Co. has increased capital stock from $5,000 to $8,000. (Post-Office, Palmetto Grove.)

MINDEN, LA.—Council closed contracts Oct. 19 for material for its $36,000 water-works, following firms securing contracts: The Briggs-Weaver Machinery Co., of Dallas, boilers, steam pumps and air compressors; Rensselaer Mfg. Co., Troy, N. Y., hydrants, valves, etc.; Chicago Bridge & Iron Works, tank; Universal Pipe Co., pipe.

DICKSON, TENN.—A. G. Rickert, according to reports, is to install water-works. Supply is to be pumped from well.

CHATTANOOGA, TENN.—City Water Co. is considering extension of its mains to Sherman Heights and possibly to Boyce and East Chattanooga.

JELLICO, TENN.—Water-works agitated.

KNOXVILLE, TENN.—Bids were opened by the Water-Works Commission, Norman B. Morrell, Secy., Oct. 28, for furnishing and constructing water-works system. Local press reports state that but two bids on the com-

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

plete work were received, that of the Callahan Construction Co., Knoxville, at $658,842, and that of W. W. Cook & Son, Junction City, Kan., at $608,175. The commission is stated to have let the contract to the latter firm.

ELYRIA, O.—We are informed that bids will be received in near future for 5,000,000 gallon pump. Geo. L. Weller is Supt. W.-W.

LEWISBURG, O.—C. O. Lucas, Cy. Engr., Greenville, O., is stated to have estimated cost of constructing water-works for this place at $14,000.

COLUMBUS, O.—Toledo & Ohio Central R. R. has let a contract to American Water Softener Co., Philadelphia, Pa., for a 250,000 gallon water purifying plant.

GRANTPARK, ILL.—Village Board, according to reports, is to install water-works.

LAGRANGE, ILL.—The Lagrange Service Co., Chicago, Ill., has been incorporated with a capital of $100,000, to buy electric light and water-works plant at the Village of Lagrange Park and Grossdale. Buell McKeever and George C. Madison and Henry J. Dunbough are incorporators.

LA SALLE, ILL.—Bids are asked by City Clerk until 7.30 p. m., Nov. 7, for furnishing a horizontal crank and fly wheel compound condensing pumping engine, of a capacity of 3,000,000 for the water-works system of this city. W. A. Panneck, Mayor; F. J. Pierard, Cy. Clk.

APPELTON, WIS.—Special Water-Works Committee has two sites under consideration for new water-works plant, and has instructed Geo. W. Sturtevant, Consult. Engr., Chicago, Ill., to proceed with his revision of plans and specifications. It is expected that these may be ready for submission to the council by the end of November.

WASHINGTON, IA.—Bids are asked by city clerk until Dec. 1 for one air compressor, complete, with a capacity of from 500 to 600 cu. ft., free air, working against a pressure of from 70 to 100 lbs. Jno. H. Steck, Cy. Clk.

ST. PAUL, MINN.—State Board of Control has let contract for two 50,000 gallon steel tanks, to Minnesota Tank Co., Minneapolis, Minn., to be placed at state institutions at Anoka and Hastings.

BENSON, NEB.—Village votes Nov. 8 on issuing $15,000 of bonds for municipal water-works.

FAIRFIELD, NEB.—Village votes favorably to putting in water-works to cost $13,000.

BUFFALO, WYO.—Local parties are planning to construct irrigation canal and series of reservoirs to reclaim about 57,000 acres of land. W. P. Keays is interested.

LARAMIE, WYO.—Local water-works to be improved, according to reports.

FORT MEADE, S. DAK.—Major Geo. H. Hunter, C. Q. M., writes that contract for constructing reinforced concrete reservoir, bids for which were received Sept. 30, has been let to Dunnegan & Sykes, Shenandoah, Ia., for $17,300.

DEADWOOD, S. DAK.—City has voted to issue $13,000 of water-works bonds.

SALISBURY, MO.—It has been voted to issue $20,000 of bonds for a water-works system.

LITTLE ROCK, ARK.—Home Water Co., according to reports, will spend about $10,000 in erecting masonry wall and in making other improvements to prevent muddy water.

MUSKOGEE, IND. T.—This city will, it is stated, purchase another pump.

CARLSBAD, N. MEX.—The Water Users' Association will petition the government to build a dam and irrigation system for Eddy County. It is proposed to get the government to rebuild the broken dam and assume complete control of the irrigation system.

CRIPPLE CREEK, COLO.—We are informed that Blue Valley Canal Co., recently incorporated with $150,000 capital, does not propose to do much work until next spring. The work will consist mostly of construction of ditches. J. B. Clover, Dillon, Colo., is official in charge.

HOUSTON, TEX.—Houston Water Co. has petitioned Council for privilege of boring several wells and for laying mains to connect them with its system.

DENTON, TEX.—City may issue $25,000 of bonds for constructing water-works. W. L. McCormick is Mayor.

DENVER, COLO.—Advices from this city state that farmers having property along the High Line canal will soon be called upon to vote bonds for the building of an immense reservoir in Platte Canon, six miles above the town of South Platte. It has been planning to build a storage basin and about $1,100,000 will be expended to carry out the plans.

COLFAX, WASH.—City voted Oct. 25 on adding to present water-works a gravity water supply system, water to be secured from spring north of Elberton. Creation of special fund of $55,000 to pay for the work was also voted on.

ORTING, WASH.—We are informed that Mt. Tacoma Water Co., Wm. Colegrove, Pres., is about to install a gravity water system for municipal and domestic use, and would be glad to receive prices on pipes, wood and steel, also valves, hydrants, etc. Catalogues also are desired.

NORTH YAKIMA WASH.—Bids are asked by County Commissioners until 1.30 p. m., Nov. 9, for drilling an artesian well. W. B. Newcomb, County Audr.

SEATTLE, WASH.—Board Public Works has let following contract to Pacific Coast Pipe Co.: Water main in Cortlee Ave., $7,284; water main in Dravus St., $14,172.

Resolutions have been passed for construction of water main in Plunney Ave. and other streets to cost $34,900, and for main in Western Ave., to cost $95,500. R. H. Thomson is Cy. Engr.

LEMON, CAL.—Swan River Water Co. has been incorporated with $16,000 capital. Valentine Peyton, Los Angeles, Cal., and J. J. McClintock, Lemon, are interested.

LOS ANGELES, CAL.—Bids are asked by Board Water Commissioners until Nov. 14 for an air compressor, battery of two boilers, of 300 HP. each; triple expansion pump, to be erected at the pumping plant corner of Compton and Slauson Aves. Wm. Mulholland, Supt. W.-W.

Sunnyside Water Co. has been incorporated with a capital of $34,000. J. A. Keeney and J. V. Baldwin are interested.

OROVILLE, CAL.—Tehama County Water Co. has been incorporated to furnish water to the Maywood Colony in Tehama County, it is reported. B. A. Steifer, Nimshew, Cal., is interested.

SEBASTOPOL, CAL.—Santa Rosa Water-Works Co., M. L. McDonald, Jr., Pres., Santa Rosa, Cal., is reported to be figuring on supplying this town with water.

GRASS VALLEY, CAL.—County Supervisors have awarded contract to Legg & Shaw Co. for furnishing material for water system. A. J. Edminster was awarded the contract for excavating.

SAN DIEGO, CAL.—Judge George Puterbaugh is stated to have made proposition to council in which he proposes to develop 1,000 miners' inches of water and deliver to reservoir 15 miles from University Heights reservoir.

SANTA BARBARA, CAL.—Bids are asked by Commissioners of the Water-Works Department until 4.30 p. m. Nov. 7, to supply Santa Barbara with 2,300 ft., 11-in. water pipe, 3,500 ft. 9-in. pipe, and 9,350 ft. of 6-in. pipe. A certified check for 5% required with bid.

BISBEE, ARIZ.—A resolution of intention has been adopted by city council providing for the construction and acquisition of a system of water mains and hydrants for fire protection and appropriating $7,000 for construction and acquisition of same. C. W. Hicks is Cy. Clk.

PRESCOTT, ARIZ.—Following bids were received by Capt. Chas. C. Walcutt, C. Q. M., U. S. A., for construction of (1) water distributing system and (2) reservoir at Whipple Barracks: C. H. Miller, San Francisco, Cal., (1) $18,200, (2) $8,900; Brown Bros., Prescott, Ariz., (1) $19,550; O'Brian & Rhoades, Denver, Colo., (1) $13,100, (2) $8,000, both, $21,500; Fifield & Gallagher, Phoenix, Ariz., (1) $21,885, (2) $15,445; Hughes & Stewart Construction Co., Denver, Colo., both, $25,000.

COALVILLE, UTAH.—Middle Chalk Creek Irrigation Co. has been incorporated with $6,320 capital, and proposes to divert water from Chalk Creek for irrigation purposes. Wm. K. Chappell is Pres., and T. J. Lewis, Secy.

OGDEN, UTAH.—American Falls Canal & Power Co. has been incorporated with $500,000 capital and will operate in Bingham and Logan Counties, Idaho. Lyman Skeen is Pres., and Caleb Parry, Secy.

SALT LAKE CITY, UTAH.—Local reports state that C. L. Oddie, of Tonopah, Nev., will build a 10-mile pipe line for the new camp at Goldfield.

TORONTO, ONT.—Bids are asked by Mayor Thomas Urquhart, until Dec. 20 for supply of 2,000 ft. 16-in. and 6,000 ft. 24-in. cast-iron pipe. (Advertised, Engineering News.)

ST. JOHNS, N. B.—Surveys have been started for the extension of the city water system to Lock Lomond. F. A. Barbour, of Snow & Barbour, Consult. Engrs., Tremont Bldg., Boston, Mass., is Engr.

SEWERAGE.

FAIRHAVEN, MASS.—Additional appropriation of $5,000 has been made for Oxford sewer system. $10,000 will be total appropriation for this work. Chas. F. Swift is Town Clk.

NEW YORK, N. Y.—Louis F. Haffen, Pres. Bronx Borough, has petitioned Board of Estimate for issuance of $100,000 of sewer bonds for his borough. $100,000 was appropriated.

LESTERSHIRE, N. Y.—Knight & Hopkins, Engrs., Rome, N. Y., have estimated cost of proposed sewer system for this place at $36,693, exclusive of right-of-way. Plan includes about three miles of sewers. Trustees have decided not to call special election to authorize the work this year. It is hoped to vote upon proposition next March and to begin construction by May 1, 1905.

TROY, N. Y.—Board of Contract & Supply has awarded contract for sewer in Stow Ave. to M. H. Cavanaugh, at $9,821. Contract for sewer in 15th St., from South to Congress Sts., awarded to T. H. Dumary, at $4,144; he also was awarded contract for sewer in 15th St., from South St. to Peoples Ave., at $7,427.

JERSEY CITY, N. J.—Board of Street and Water Commissioners requested Board of Finance to appropriate $14,000 for the reconstruction of sewer, at Fairmount Ave. and Boland St. Charles Van Keuren, Ch. Engr., Bd. St. and Water Comrs.

PASSAIC, N. J.—Bids are asked until Nov. 4 by Council Committee on Sewers for constructing vitrified pipe sewer in Linden St. Samuel Mulloy, William L. Hammond and James King, Committee.

JERSEY CITY, N. J.—Bids are asked until 2 p. m., Nov. 7 by Board Street and Water Commissioners for construction of relief sewer in Jackson Ave., Union St., Claremont Ave., Garfield Ave. and Carteret Ave., thence to New York Bay tidewater; $163,000 will be available for this work on Dec. 1. Esitmated cost is $160,000. C. H. Van Keuren is Ch. Engr. Estimated quantities: Circular brick sewer, about 280 ft. of 30-in., 240 ft. of 33-in., 235 ft. of 48-in., 50 ft. of 51-in., 200 ft. of 54-in., 540 ft. of 60-in.; 2,000 cu. yds. of rock excavation; 1,400 cu. yds. of concrete; 100 cu. yds. of brick masonry; 50,000 ft. of piles, driven; 122,000 ft. B.M. capping; 220,000 ft. B.M. flooring; 50,000 ft. B.M. sheathing; 27 receiving basins, connected 12-in. pipe. Also following steel pipe sewer: 120 ft. of 52-in., 1,460 ft. of 78-in., 300 ft. of 60-in., 710 ft. of 72-in., 3,400 ft. of 96-in.; brick sewer: 250 ft. of 42-in., 250 ft. of 33-in., 625 ft. of 66-in., 1,100 ft. of 51-in.; three expansion joints; ten air valves with cast-iron covers; 20,000 steel I-beams, at 2½ cts. per lb. Time allowed for the completion of the work, 350 working days. James S. Nolan, Chn. Com. on Sts. and Sewers.; Geo. T. Bouton, Clk. Bd.

GREENSBURG, PA.—Contract for constructing a general system of sewers for Southeast Greensburg is reported to have been awarded to Thomas Croum Co., Pittsburg, at $5,849. S. G. Ebersole is Secy. Borough Council; J. J. Neel, Engr., 42 West Pittsburg St., Greensburg.

HARRISBURG, PA.—Election probably will be held next February to vote upon municipal improvement loan. It will be a $100,000 loan for sewer system improvements. This amount is estimated as total cost of sewers needed within next two years. M. B. Cowden is Cy. Engr.

PHILADELPHIA, PA.—Contracts are stated to have been awarded by Peter E. Costello, Dir. Dept. Pub. Wks., for following sewers: Castor Road and Pratt St., to M. J. Hogan & Co., 1020 Real Estate Trust Bldg., at $28,873; in Ashdale St., to David McMahon, Germantown, $46,813; in Duncannon Ave., Henderson & Co., 1221 Arch St., $10,900, in Ninth St., M. J. Hogan & Co., at $21,275. Bids received for sewer in Pratt, Faust and Saul sts. were rejected. Lowest bid was $87,466.

WEST CHESTER, PA.—Engineers will submit plans for a sewer system for this place. Estimated cost, $180,000 to $200,000. Work probably will not begin until next spring. C. H. Pennypacker is Burgess.

FORT HOWARD, MD.—Bids are asked until Nov. 10 for taking up and repairing outlet of sewer here. Wm. M. Cruikshank, Q. M.

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HAVRE DE GRACE, MD.—Bids are asked by Sewerage Commission until Dec. 1 for furnishing [illegible] and constructing about 3½ miles of pipe sewer [illegible] in diameter. C. C. Pusey, Secy.; William [illegible]man, Engrs., New York. (Advertised, Engineering [illegible]) City Council is stated to have authorized an issue [illegible] 000 bonds for the system.

BALTIMORE, MD.—$85,950 has been appropriated for construction of new sewers next year, as follows: [illegible] Park, $29,000; Monroe and Payson Sts., $35,000; [illegible] run, $15,000; Peck's branch, $2,300; Mosher St. [illegible] Park Ave., $1,500; Low St., $1,350; Eagle, Cole & [illegible] Sts. sewers, in Carroll Park, and the Ogler run [illegible]rs creek sewers, east of Patterson Park, are to be connected. Benjamin T. Fendall, Cy. Engr., may be addressed.

WASHINGTON, D. C.—Isthmian Canal Commission has let contract for sewer pipes and specials to American Sewer Pipe Co., Pittsburg, Pa., for $19,269. Pipes and specials are to be delivered at Colon.

DARLINGTON, S. C.—City has voted to issue [illegible] of bonds for constructing sewer system.

GRIFFIN, GA.—Bids are asked by the Light, Water and Sewerage Commission until Nov. 22 for constructing a complete system of sewers, including the material and making additions to the water-works plant, consisting of about 15 miles of 8-12-in. pipe sewers, 170 manholes and 60 flush tanks, and water pipe, 6-12 ins. in diameter, 42 hydrants and 50 valves, 6-12-in. drain. Jas. M. [illegible]ner, H. H. Bass, E. C. Smith, Comrs. (Advertised, Engineering News.)

BRAIDENTOWN, FLA.—City will construct sewers and drains, it is reported. A. T. Cornwall is Mayor.

BIRMINGHAM (WOODLAWN STATION), ALA.—Council has under consideration an ordinance providing for the issuance of $30,000 of bonds for sewer construction at Woodlawn, to connect with county trunk sewer.

PADUCAH, KY.—Contract probably will be let soon for building sewers in Kentucky Ave.

DAYTON, O.—Board of Public Service has awarded contract for constructing a storm water sewer in Horton St., from Fifth St. to Hydraulic Race, to Wm. Rehling, at $4,645. Contract for paving North Main St. was awarded to James C. Conley, at $17,473.

CINCINNATI, O.—Bids are asked until Nov. 23 for constructing sewers in portions of several streets. Geo. F. Holmes, Clk. Bd. Pub. Service. Bids are asked also for construction of sewers, to be received until Nov. 4 and Nov. 21.

MARION, O.—On Nov. 10 the contract or privilege for constructing and completing Blaine Ave. ditch will be sold at public auction to lowest bidder. Approximate quantities: 1,900 lin. ft. of single ring, 3-ft. diameter; 2,272 lin. ft. of double ring, 3½-ft. diameter brick arch. Specifications may now be seen at office of H. H. Noyes, County Surveyor. L. M. Hipsher, Audr.

FAYETTE, O.—A. P. Southworth, of Adrian, Mich., has been awarded contract for a sewer here, at $4,317.

WARREN, O.—Bids are asked by Board Public Service until Nov. 7, for constructing 12-in. sewer in Dickey Ave., about 1,000 ft.

MANSFIELD, O.—Bids are asked by Board Public Service, until Nov. 9, for constructing a 3-ft. brick storm-water sewer in Orange St.

CLEVELAND, O.—Council will take action on Nov. 7 upon plan to construct several sewers. Peter Witt, Cy. Clk.

MONTICELLO, IND.—A sewer will be constructed in alley between Main St. and Tippecanoe St. Robert A. Lawrie, Engr., will submit report to Board Trustees on Nov. 15. W. J. Gridley, Clk. Bd.

DETROIT, MICH.—Contracts for Mack Ave. sewers has been awarded to Langley & Jeynes, 681 Toledo Ave., at $5,027. John A. Mercier, 211 Hammond Bldg., has contract for 14th Ave. extension, at $4,866. Contracts for lateral sewers were awarded to John S. Affeld, 457 Baker St., and Thos. G. Whittaker & Son, 189 Selden Ave.

Special election will be held by village of Hamtramck to vote on proposition to issue bonds for sewer system. Village has been granted permission to connect with Detroit system at Morrow, Joseph, Campau and Mt. Elliott Aves. Estimated cost, $68,000. Seneca C. Traver is Village Atty.

HIGHLAND PARK, MICH.—Whittaker & Son, Detroit, were awarded the contract, at $8,303, for construction of a sewer at this place. W. C. King, 12 Moffat Bldg., Detroit, is Engr. R. Milton Ford is Village Clk.

SCOTTSVILLE, MICH.—City has voted to issue bonds for sewer system. It will cost $2,700.

OTTAWA, ILL.—Chas. F. Wilson, Cy. Engr., will receive bids soon for constructing nine blocks of sewers in Gulbn St. Est. cost, $12,000. Plans are prepared.

PEORIA, ILL.—It is reported that Board of Public Works will build the following sewers next spring: West section, 8-in. to 6-ft. circular brick sewer; estimated cost, $325,000. Sanger St., 8-in. circular brick sewer, $90,000. South St., district No. 1, circular brick and sewer pipe, $35,000. H. E. Beasley is Cy. Engr.

LINCOLN, ILL.—Bids are asked until Nov. 7 for constructing a sewer. Robert M. Berry, Cy. Clk.

MILWAUKEE, WIS.—Richard Forrestal is reported to have been awarded a contract for building the first section of the intercepting sewer to be laid in the east bank of the Milwaukee River above the dam. Cost, about $30,000 or $14.89 a ft. Another press report states that this contract was awarded to Donahue & O'Donnell.

CRESTON, IA.—Bids are asked until 7.30 p. m., Nov. 7, for constructing a sanitary sewer. J. C. Sullivan, Mayor. W. H. Robb, Clk.

SIBLEY, IA.—Bids are asked until noon, Nov. 15, for furnishing 4,200 ft. of 15-in. tile and 4,700 ft. of 12-in. tile, f. o. b. Bigelow, Minn.; also for the work of installing this tile. Geo. W. Thomas, County Audr.

BRAINERD, MINN.—Bids are asked until Nov. 7 by F. E. Low, Cy. Clk., for furnishing material and laying sewers in sewer district No. 1, requiring 381 ft. of 10-in. pipe, 200 ft. of 8-in. and 75 ft. of 6-in. pipe, two manholes and two lamp holes.

ST. PAUL, MINN.—Bids are asked by Board of Public Works until 2 p. m., Nov. 7, for the construction of a sewer in Conway St. John S. Grode, Pres.; R. L. Gorman, Clk.

WICHITA, KAN.—Bids are asked by J. L. Leland, Cy. Clk., until noon, Nov. 7, for constructing a sewer in storm water sewer district No. 1. Approximate quantities: 1,640 ft. 11 of 24-in., 678 ft. of 18-in., 194 ft. of 12-in., 325 ft. of 10-in. and 110 ft. of 8-in. pipe; eleven manholes complete; 18 catchbasins; six 8-in. observation holes complete; bids will be received upon 12 ft. of 12-in. cast-iron pipe per ft., and 24 ft. of 12-in. cast-iron pipe per ft.

KALISPELL, MONT.—Bids are asked until 8 p. m., Nov. 7, for constructing an 8-in. sewer. W. B. Rhoades, City Clk.

KANSAS CITY, MO.—A press report states that the county court has granted the Standard Oil Co. permission to build a $30,000 sewer from its refinery at Sugar Creek to a point below the intake pipes of the Independence water-works. It will be about one mile long.

ST. JOSEPH, MO.—Bids will be received, probably within next two weeks, for extending Blacksnake Creek and Sycamore St. sewers. W. H. Floyd, Jr., Cy. Engr., recently wrote us that city had voted $250,000 of bonds for construction and extension of main sewers. These bonds have been sold. The money available has been apportioned as follows: Extension of Blacksnake Creek sewer, $50,000; extension of Sycamore St. sewer, $18,000; extension of Grand Ave. sewer, $30,000; extension of Mitchell Ave. sewer, $60,000; extension of Wyatt Park extension sewer, $10,000, and new sewers for South St. Joseph, $75,000. Sewers will vary from 4 to 15 ft. in diameter and will be of brick and concrete. In some of them bids will be asked for in both ways. The payment for the work will be in cash. Mr. Floyd is preparing plans and specifications for a portion of this work. Bids will be advertised for in Engineering News.

BEAUMONT, TEX.—Election is to be held on Nov. 15 to vote on issuance of $15,000 of sewer bonds.

FORT BAYARD, N. MEX.—Bids are asked until 11 a. m., Nov. 8, for construction of a sewage purification plant at this post. H. M. Powell, Q. M.

HOOD RIVER, ORE.—Sewer system will be constructed. Council passed an ordinance providing for its installation, but it has been opposed by property owners.

PORTLAND, ORE.—Bids received for building the Irvington district sewer were as follows: E. W. Riner, $110,050; Frainey & Keating, $150,296; Smyth & Howard, $135,858; J. W. Sweeney, $118,902; J. B. Slemmons, $128,-329; Joseph Paquet, $123,902. City Engineer's estimate was $125,000. The sewer will be over two miles long and extend from East 21st and Stanton Sts. to the Willamette River. It is estimated that 84,526 cu. yds. of earth must be excavated. For a portion of the way the sewer will run 30 to 40 feet below the surface.

LOS GATOS, CAL.—Ordinance is before Trustees calling a special election on Dec. 5, to vote on proposition to bond the town for $4,000 for new outlet sewer and septic sewer tank.

SAN DIEGO, CAL.—J. S. Schirm, San Diego, was awarded contract by Board Public Works for the following pipe: 40,500 lengths of 6-in., 6,700 lengths of 8-in., 3,450 of 10, 7,700 of 12, 1,320 of 14, 1,160 of 16, 260 of 20, and 2,850 6 × 4 Y's, three 10 × 6 Y's, 384 12 × 4 Y's, four 12 × 6 Y's, two 12 × 8 Y's, two 14 × 10 Y's, at $17,093.

SAN FRANCISCO, CAL.—Bids are asked until Nov. 21 for purchase of bonds, including $724,000 of sewer bonds. Chas. W. Fay, Clk. Bd. Supervisors.

TORONTO, ONT.—Bids are asked until Nov. 8, noon, for construction of pipe sewers; also for supplying 4-ft. steel pipe for extension of Jarvis St. sewer. Thomas Urquhart, Mayor.

WINNIPEG, MAN.—Bids are asked until 8.30 p. m., Nov. 8, by C. J. Brown, Cy. Clk., for the following quantities of pipe: 18-in. pipe, 16,000 ft.; 15-in. pipe, 4,300 ft.; 12-in. pipe, 18,000 ft.; 9-in., 4,000 ft.; 300 junctions, 18 × 9-in., 300 junctions, 12 × 6-in., 300 single wall 6-in. slants; 300 double wall 6-in. slants.

GARBAGE DISPOSAL—STREET CLEANING

PORTLAND, ME.—Following bids were received by Capt. W. A. Yates, Q. M., U. S. A., Oct. 12, for constructing crematory at Fort McKinley, Me.: (1) for a reduced size crematory as designated; (2) as per specifications; (3) crematory set No. 1; (4) crematory No. 2. The Dixon Garbage Crematory Co., Toledo, O., (1) $6,-770 (2) $14,615; Jarvis Engineering Co., Boston, Mass., (3) $6,875; (4) $3,940.

MUNCIE, IND.—W. F. White, L. W. Cates and Charles Nehart, Members Council Garbage Committee, have recently been in Minneapolis, Minn., investigating methods of garbage disposal, preparatory to drawing up plans for a new crematory in this city.

CHICAGO, ILL.—In a communication to the finance committee of Council Oct. 24, Mayor Carter Harrison urged that some methods be presented at once for caring for the city garbage. Department of Public Works has estimated that necessary plants, including equipment, could be installed for $1,000,000.

ST. LOUIS, MO.—Ordinance was to come before Board Public Improvements, Nov. 1, calling for erection of three garbage incinerators, and asking $150,000 appropriation for that purpose. Hiram Phillips is Pres. Bd. Pub. Improvements.

LONDON, ONT.—A by-law is to be voted on at the municipal election in January to issue debentures for installing complete system of garbage disposal for this city. The cost is estimated at about $10,000.

STREETS AND ROADS.

BEVERLY, MASS.—Board of Aldermen appropriated $5,000 for the reconstruction of Federal, Bridge and River Sts.

LENOX, MASS.—Mrs. Geo. Westinghouse will build a boulevard here next spring. State Highway Commissioners will furnish the plans.

HARTFORD, CONN.—Highway Commissioner Macdonald has awarded a contract for highway work in Wethersfield to Thomas Kearney of Meridan. The contract covers two sections of telford road, one in South Wethersfield, 375 ft., and the other on Franklin Ave., 1,614 ft. Total amount, $3,163.

BROOKLYN, N. Y.—Bids are asked by Commissioners of Parks until Nov. 10 for constructing roadway and walks in rear of Institute of Arts and Sciences. John J. Pallas, Pres.

BINGHAMTON, N. Y.—Bids are asked until Nov. 21 for asphalt pavement repairs for 3,000 to 10,000 sq. yds. Bids will also be received for a portable asphalt plant, including mixer of at least 300 sq. yds. capacity per day, steam roller of from 3 to 5 tons weight and all other tools necessary. D. C. Herrick, Cy. Clk. (Advertised, Engineering News.)

NIAGARA FALLS, N. Y.—Barber Asphalt Co. was awarded the contract for construction of asphalt pavement on South Ave., at $7,662.

TROY, N. Y.—Bids are asked by Board of Contract and Supply until Nov. 4, 11 a. m., for regulating and paving with asphalt on First St. James M. Riley, Clk.

Bids are asked at the same time and place for curbing, regulating and paving Seventh Ave. with vitrified brick.

TROY, N. Y.—Contract for brick pavement on Walker Ave. was awarded to T. Henry Dumary, for $6,644, by Board of Contract and Supply. James I. Riley is Clk. of Bd.

JERSEY CITY, N. J.—The Hackensack Meadows Co. has agreed to give Essex and Hudson Counties a strip of land which would enable them to widen Plank road to 100 ft. It was decided to except same, make roadway 60 ft., lay a block pavement, remove trolley tracks to center of road and lay sidewalks on either side. The matter will be submitted to both boards at their next meetings.

SOMERVILLE, N. J.—Bids are asked by Board of Chosen Freeholders of Somerset County until Nov. 22 for macadamizing two roads. Plans and specifications may be seen at office of Henry T. Budd, State Comr. Rds., Trenton. Wm. J. Logan, Dir.

ATLANTIC CITY, N. J.—All bids for paving Atlantic Ave., which were opened by City Council Oct. 24, were rejected. Richardson & Ross were the lowest bidders at $1.78 for asphalt and for vitrified block $2.04.

ALLEGHENY CITY, PA.—Ordinances were passed by Councils on Oct. 26, authorizing the construction of a number of sewers, and the grading and paving of a number of streets and laying of flagstone sidewalks, in various wards of the city.

McKEESPORT, PA.—The city will advertise for bids the latter part of December, for grading, paving and curbing of 18th St.

McKEESPORT, PA.—Bids are asked by C. E. Soles, Cy. Controller, until Nov. 8 for grading and paving with vitrified brick in Eagle alley. Plans and specifications may be seen at office of City Engineer.

GREENSBURG, PA.—P. F. McCann, City, was awarded contract to build four miles of macadam road in Westmoreland County. Cost, $31,000.

HARRISBURG, PA.—Bids are asked by State Highway Department, until Nov. 28, for construction of 17,183 ft. of road in Chester County. Jos. Hunter, State Highway Comr.

KITTANNING, PA.—Ordinances authorizing the paving with brick on several streets were adopted by Town Council.

CONEMAUGH, PA.—Bids are asked by Borough Council of East Conemaugh, until Nov. 7, for paving of waterways on Greene St.. W. J. McCartney, Boro. Clk.

HARRISBURG, PA.—Bids are asked by State Highway Department, until Nov. 15, for macadam and telford roads in Tioga County, about 22,751 lin. ft. Specifications on file in office of Engineering News, 220 Broadway, New York.

BALTIMORE, MD.—The cost of widening Charles St. will cost about $325,000, according to an estimate made by Chairman Swann, of Burnt District Commissioners.

BALTIMORE, MD.—Board of Estimates has approved the ordinance providing for an appropriation of $100,000 for an addition to Wyman Park. Maj. R. M. Venable is Pres. Park Bd.

FORT MYER, VA.—Bids are asked by Capt. G. C. Barnhardt, Q. M., until Nov. 8, 10 a. m., for constructing a macadam road at this post.

MONTGOMERY, ALA.—Bids are asked by R. S. Williams, Cy. Treas., until Nov. 7, 12 m., for paving sidewalks on Hull and Sayre Sts., according to specifications in City Engineer's office.

LOUISVILLE, KY.—The Selvage Construction Co. was the lowest bidder for paving Market St. Cost, $8,000.

AKRON, O.—Ray F. Hamlin, Clk. of Council, informs us that the legislation for paving Spicer St. has just been started.

CINCINNATI, O.—Bids are asked by Board Public Service until Nov. 9 for grading on Eastern Ave. Geo. F. Holmes, Clk.

CINCINNATI, O.—Bids were opened Oct. 20 for improving Queen City Ave. J. G. Collopy & Co., of Covington, were the lowest bidders, at $69,000. Engineer's estimate was $87,000.

CINCINNATI, O.—Henkel & Sullivan, 621 Main St., inform us that they will sublet 50,000 yds. of grading.

CLEVELAND, O.—Bids are asked by Board Public Service until Nov. 9 for grading, curbing and paving with tar macadam on Bellflower Ave. A. R. Callow, Secy.

COLUMBUS, O.—Resolutions to construct cement sidewalks on several streets were adopted by City Council. John T. Barr, Clk. of Council.

LAKEWOOD, O.—Bids are asked until Nov. 5 for laying stone sidewalks on Detroit St. Wm. H. Evers Engineering Co., 237 Arcade Bldg., Cleveland, are Engrs.; Henry J. Senel, Village Clk.

LANCASTER, O.—John N. Wolfe, Cy. Engr., informs us that bonds are advertised to raise money to open Chestnut St.

LIBERTY CENTER, O.—Bids are asked by J. S. Mires, Village Clk., until Nov. 15 for grading, curbing and paving with vitrified brick on a portion of East St.

LOWELLVILLE, O.—Bids are asked by Henry W. Williams, Village Clk., until Nov. 10 for the repair and improvement of Wood St.

MARION, O.—Bids are asked by Wm. Fies, Cy. Clk., until Nov. 16, for laying a sandstone sidewalk on Seffner St.

OBERLIN, O.—The Council will probably pave West Lorain St. Preliminary legislation has commenced.

ST. BERNARD, O.—Bids are asked by Geo. Meyer, Village Clk., until Nov. 18 for grading, curbing and macadamizing a portion of Jackson St.

TOLEDO, O.—Bids are asked by D. T. Davies, Jr., County Audr., until Nov. 18, for the repair of stone roads in this county, according to plans on file with County Surveyor.

WELLSVILLE, O.—Bids are asked by H. W. Sinclair, Cy. Clk., until Nov. 4 for the improvement of Riverside Ave. and Sixth St., in all about 6,250 sq. yds. paving.

YOUNGSTOWN, O.—Bids will soon be invited for the paving of Watt and Elm Sts., and for laying sidewalks on Wade and Iron Sts.

HUNTINGTON, IND.—Bids are asked until Nov. 8 by Henry H. Wagoner, Engr., for furnishing material, grading, curbing and paving with vitrified brick, alley between Warren and Guilford Sts.; also on same date for constructing 6 ft. cement or brick sidewalk on a portion of Division St.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

ALTON, ILL.—Board Local Improvement awarded, Oct. 27, the contract for paving Weigler St. to David Ryan and for paving Third and Fourth Sts., to Wolf, Mayson & Curdie.

GREEN BAY, WIS.—Bids are asked by Committee on Streets and Bridges until Nov. 22 for grading, graveling Ninth St., requiring approximately 2,683 cu. yds. gravel and 3,900 lin. ft. ditching.

KEOKUK, IA.—Bids are asked until Dec. 1 for construction of sidewalks on several streets. J. Ross Robertson, Cy. Engr.

ST. PAUL, MINN.—Final orders for the paving of Fort St. and the grading of Magnolia St. were approved by Council.

ST. PAUL, MINN.—College Ave. will not be paved until next spring. Barber Asphalt Co. will do the work.

A preliminary order for grading center 60 ft. of Raymond Ave. was passed.

COFFEYVILLE, KAN.—City Council let the contract to a Leavenworth firm for paving of 35 blocks. The contract price was $127,000. Work is to commence at once and be finished within a year.

OMAHA, NEB.—D. M. Click was awarded the contract for 8,000 ft. of new sidewalk around the High School building.

ST. JOSEPH, MO.—County Court has issued an order directing the Road and Bridge Commission to advertise for bids for macadamizing a mile of road in South St. Joseph, and the cinder road from city limits to Lake Contrary.

SEATTLE, WASH.—The Board Public Works awarded contracts for street improvements, as follows: Sixth Ave. west, concrete walks, Sparzer Concrete Co., $5,789; First Ave. south, wooden walks, J. A. Bailey, $2,500.

SPOKANE, WASH.—Contracts for street grades and sidewalks were awarded by Board Public Works to Peter Costello. Total cost, $10,400.

TACOMA, WASH.—Contract for grading and construction of sidewalks on South 11th St. was let by Commissioner Public Works to James Lee for $6,175.

SEATTLE, WASH.—A petition has been passed by Board Public Works ordering the grading of Westlake Ave. Est. cost, $49,500. R. H. Thomson is Cy. Engr.

SEATTLE, WASH.—Contract for construction of concrete walks on Crockett St. was awarded by Board Public Works to Paul Wagner for $13,491.

LOS ANGELES, CAL.—Ordinances of intention to grade, pave, etc., on several streets were adopted by City Council. E. R. Werdin, Street Supt.

REDDING, CAL.—The United States Mining Co. has awarded a contract to L. J. Fader for construction of a wagon road from Kennet to the Mammoth mine.

OAKLAND, CAL.—Council passed a resolution authorizing City Engineer to prepare plans and specifications for grading, curbing and macadamizing Watson Ave.

WALKERVILLE, ONT.—By-laws to provide $22,000 for laying bitulithic pavements, and a further sum for paving Third and Fourth Sts. were carried.

MANUFACTURING PLANTS.

BANGOR, ME.—The Great Northern Paint, Chemical & Mfg. Co. was incorporated with $500,000 cap. stock. F. R. Russell is Pres.

ORANGE, MASS.—The factory of New Home Sewing Machine Co. was damaged by fire. Loss, $100,000.

MONTVILLE, CONN.—Monarch Woolen Mills Co. has filed a certificate of incorporation. The capital stock is $80,000, and the concern will manufacture yarns, woolens and worsted goods and other textile fabrics. The incorporators are Arthur H. Arnold, W. G. Hartford, Wm. D. Hawkins and Wm. H. Gilbert.

WATERTOWN, CONN.—Griggs & Hunt, Arch., Waterbury, Conn., have prepared plans for a factory for Hemingway & Bartlett Silk Mfg. Co., at Watertown. Work will be started in the spring.

OLEAN, N. Y.—The Buswell-Hubbard will probably rebuild tannery recently burned at a loss of $75,000.

NEWBURGH, N. Y.—The Hudson River Woolen Mills are to build an extension to their plant.

BUFFALO, N. Y.—The Schoellkopf, Hartford & Hanna Chemical Co. will rebuild its smelting plant destroyed by fire Oct. 22. Estimated loss on building and machinery was $20,000.

OSWEGO, N. Y.—A new starch company, to be known as the Maize Product Co., capital stock $200,000, will build a plant here.

LONG ISLAND CITY, N. Y.—A one-story brick automobile and carriage factory, 100 × 500 ft., and boiler house will be built on Star Ave. by Lester Van Brunt. Cost, $50,000. Plans were prepared by Vehicle Equipment Co., Church Ave. and 37th St., Brooklyn.

BROOKLYN, N. Y.—The contract for the erection and completion of the Kurscheedt Mfg. Co.'s new factory located at Nicholas Ave. and Fulton St., City, was awarded Oct. 31 to Frank B. Gilbreth, 34 West 26th St., New York.

PHILADELPHIA, PA.—The Philadelphia Rubber Works, which recently purchased the Watkinson shoe factory, at Schuylkill Ave. and Reed St., will expend about $200,000 in the erection of buildings. The present factory will be remodeled, in addition to which will be built a one-story fireproof boiler house, 29 × 86 ft., with 1,500 HP. capacity; a one-story engine and pump house, 48 × 56 ft., a three-story vulcanizing building, 49 × 58 ft., and a factory building three stories, 60 × 116 ft. Contract has been awarded to Wm. Steele & Sons, who will shortly begin work.

PHILADELPHIA, PA.—Ballinger & Perrot, Archs., 1200 Chestnut St., have invited bids for a factory at Bodine and Willow Sts., for J. C. Matthews. Brick, concrete and steel, 5 stories, 80 × 40 ft. Cost, $25,000.

Otto C. Wolf, Arch., 1025 Arch St., has invited bids for a three-story addition to an ice machine house, at Germantown and Columbia Aves., for Theo. Finkenauer.

BRISTOL, PA.—Davis and Davis, Archs., 907 Walnut St., Philadelphia, are preparing plans for a two-story addition to carpet mill, for Wm. H. Grundy & Co.

LEHIGHTON, PA.—The Lehighton Brewing Co. will have plans started shortly and work will be started in the spring for a brewery to consist of a number of buildings.

PHILADELPHIA, PA.—Brockie & Hastings, 328 Chestnut St., have plans ready for bids for a two-story laundry at 33d and Spruce Sts. for the University of Pennsylvania Hospital. Brick and steel, slag roof, steam heat, elevator and laundry machinery.

PHILADELPHIA, PA.—Press reports state that the American Agricultural Co. will erect at its plant at Greenwich Point a $100,000 building for the manufacture of sulphuric acid.

DU BOIS, PA.—John R. Bennett, Morgantown, W. Va., was awarded contract for building 200 coke ovens for Cascade Coal & Coke Co.

PITTSBURG, PA.—A. J. Logan & Co., city, will erect a six-story factory and warehouse building at Liberty St. and Spring alley, size 100 × 120 ft. Plans by W. G. Wilkins Co., Westinghouse Bldg., City.

BALTIMORE, MD.—Walter M. Krager, Builders' Exchange Bldg., is corresponding with a manufacturing concern of Camden, N. J., which is desirous of locating its plant here.

BALTIMORE, MD.—Furst Bros. & Co., 213 West Camden St., have invited bids for a factory at Stockholm St. and Creek Alley. Brick, 4 stories, 62 × 132 ft.

BALTIMORE, MD.—The Baugh Chemical Co., 302 East Lexington St., has awarded contract to Sanford & Brooks, contractors, 28 East Mt. Vernon Place, for construction of trestle for the discharge and loading of vessels. Structure to be 260 ft. long and 31 ft. high with two towers each 40 ft. and will be equipped with electric railway. The company has also had plans prepared for a trussed framed building, 510 ft. long, for burning and mixing materials used in the manufacture of fertilizer.

BALTIMORE, MD.—The Calvert Building & Construction Co., Calvert Bldg., has awarded contract to Norcross Bros. Co., Equitable Bldg., for construction of manufacturing building to be located in rear of Equitable Bldg. after plans and specifications by Sperry, York & Sawyer, Archts., Builders' Exchange Bldg. Structure to be five stories, with basement, 27 × 53 ft.; brick with stone trimmings, concrete foundation, steel-frame fireproof construction, slag roofing, electric wiring and fixtures and sanitary plumbing.

FREDERICKSBURG, VA.—Henry Wissner desires to correspond with parties manufacturing barbed wire for farm fencing.

GRAFTON, W. VA.—The Baltimore & Ohio Ry. Co. will establish machine shops and round house here, at a cost of $30,000. D. D. Carothers, of Baltimore, Md., is Ch. Engr.

WILMINGTON, N. C.—The Heinz Pickle Co. will probably locate a box and barrel factory in this city. M. D. Hayes can inform.

WINSTON-SALEM, N. C.—The Union Guano Co., capital $225,000, in which H. E. Fries is interested, will erect a large fertilizer factory here.

GREENBORO, N. C.—The supervisor of Etowah Cotton Mills will begin at once the construction of mill building. The Thomas Lumber Co., of Greensboro, will furnish the lumber. The mill will cost $250,000. The equipment of mill and construction of necessary residences will cost $250,000.

HILLSBORO, N. C.—S. Strudwick, P. C. Collins, T. N. Webb and others have incorporated the Bellvue Mfg. Co., to manufacture cotton and other textile fabrics. The capital stock is $125,000.

SUMTER, S. C.—The Virginia-Carolina Chemical Co., with headquarters at Richmond, Va., will erect an extensive fertilizer factory here. R. Q. Manning, acting for the company, has purchased a site of 85 acres for the plant.

COLUMBUS, GA.—The Davis Warehouse Co. will erect a fertilizer factory here. Work will begin at once.

JACKSONVILLE, FLA.—The Strickland Lumber Co., capital $100,000, has been chartered to manufacture building material, operate saw mills, etc. The incorporators are: C. Strickland, Frank Roberts and J. W. West, of Valdosta, Ga.; J. E. Harris, of Jacksonville, and W. J. Kelly, of Savannah, Ga.

BARTOW, FLA.—The Bartow Ice Factory, owned by E. W. Codington, which was burned recently at a loss of $8,000, will be rebuilt at once on a larger scale.

MONTGOMERY, ALA.—An ice factory will be erected here by D. P. West.

GENEVA, ALA.—W. W. Barnett, D. O. Vaughn, D. L. Watson and others are interested in a company about to be organized for the establishment of a cotton mill.

GADSDEN, ALA.—The Alabama Steel & Wire Co. has stated that it will erect a steel rod, wire and nail mill here. The company has a mill at Ensley.

SYLACAUGA, ALA.—A company has been formed here with J. W. Brown, President, for the construction of a fertilizer plant here. The capital stock has been subscribed.

FIVE MILE, ALA.—J. L. Davis and H. M. Saunders will purchase saw mill machinery at an early date and will want prices on same. Address Watson Davis.

JONESBORO, MISS.—A $50,000 company will be organized here to erect a cotton oil mill and ice factory. J. W. Swayze, P. M. Mathews and others are interested and can give information.

VICKSBURG, MISS.—The Delta Plantation & Lumber Mill Co. has been chartered to do business here. Capital, $50,000.

WATER VALLEY, MISS.—The J. A. Harris Co., capital $20,000, has been chartered to build a brick and lumber plant.

YAZOO CITY, MISS.—The Yazoo Cotton Mills will increase their capital $100,000 for improvement purposes.

MINDEN, LA.—James B. Williams, Pres. Automatic Scale Co., is in Kalamazoo, Mich., arranging for the manufacture in that city of a universal automatic weighing baggge machine invented by himself.

CHATTANOOGA, TENN.—It is reported that the Cincinnati Southern Railroad has had plans prepared for three-story building 125 × 334 ft. for railroad shops, to be equipped with three 80-ton cranes and three turntables. About $200,000 will be expended. Company has not as yet decided whether the shops will be located at Chattanooga or Somerset, Ky., but plans for the Chattanooga building can be seen at office of James C. Howell, station master, Chattanooga. Wm. Doyle, Somerset, Ky., is Supt. Bridges and Bldgs.

MEMPHIS, TENN.—A new cotton factory is being formed and will locate a compress plant with a capacity of 500,000 bales and a warehouse with a capacity of 100,000 bales at North Memphis.

LEWISBURG, TENN.—The factory of the American Lead Pencil Co. was destroyed by fire. Loss, $50,000. It will probably be rebuilt.

YOUNGSTOWN, O.—The Youngstown Iron Sheet & Tube Co. is taking bids on the erection and equipment of a 175-ft. extension to the tube threading department, 200 ft. to the pipe warehouse, an additional tube furnace and one heating furnace. James A. Campbell is Gen. Mgr. and E. G. Murray, Pur. Agt.

A. W. Thompson, Pres. Republic Iron & Steel Co., general offices, First Natl. Bank Bldg., Chicago, in his annual report says that up to $7,000,000 of the notes recently issued will be sold as needed for construction of new sheet and tin bar mills and rail finishing plant at Bessemer works here. Contracts have not been let. Charles Hart, City, is Dist. Mgr.

EVANSVILLE, IND.—The Evansville Veneer Co., incorporated with a capital of $35,000, will build a large plant on Belt Railroad. Plans have been ordered and bids will be invited soon. C. W. Talge, Louis Koss, and W. O. Calhoun are the incorporators.

LAPORTE, IND.—The Easy Wagon Co. has been organized here with $600,000 capital stock. The company proposes to erect a plant at Laporte for the manufacture of wagons. Chas. E. Russell, of Cleveland, is prominent organizer.

HARTFORD CITY, IND.—Broderick & Durhan, of Montpelier, have made arrangements to build a foundry and boiler plant in this city. Three buildings will be constructed. Bids will be received soon and buildings erected this winter.

CHICAGO, ILL.—H. T. Cass & Co. have purchased a site on North Hoyne St. and Emerson Ave. to erect a molding factory. Cost, $35,000.

KANSAS CITY, MO.—Chas. E. McSweeney is Pres. American Dressed Beef Co., capital stock $1,250,000, which proposes to erect a packing plant here to cost $250,000.

SEARCY, ARK.—It is proposed to organize a company with capital stock of $200,000 to build a cotton mill here. The plan is to induce eastern capitalists to subscribe to half the stock, and the other half will be subscribed by local people.

MANSFIELD, ARK.—The Mansfield Roller Mill Co. has incorporated with $6,000 cap. stock, to operate a flour mill. The incorporators are F. M. Bottoms, J. W. Harper, W. B. Sexton and others.

DALLAS, TEX.—The contract for factory building to be erected by G. H. Schoellkopf Saddlery Co., has been awarded to Theodore Bellharz, City. The contract price is $60,000, and the building will be completed by April 1.

BRENHAM, TEX.—The Brenham Cotton Mills will increase their capacity by installing additional spindles.

EL PASO, TEX.—J. F. Tibbetts, of Riverside, Cal., will erect a glass factory here at a cost of $75,000. Secretary Chamber of Commerce can give information.

PUEBLO, COLO.—A woolen mill to employ 200 men at the start will be established here. Secretary Business Men's Assn. can inform.

SEATTLE, WASH.—Prof. T. S. C. Lowe, of Pasadena, Cal., is in Seattle making arrangements for the establishment of a artificial ice plant. He has a site in view for location of factory.

SPOKANE, WASH.—It is reported that the Hazlewood Creamery Co., City, is to construct a new house and creamery plant. Cost, $100,000.

HANFORD, CAL.—The Directors of the Lucerne Cream & Butter Co. are considering plans and specifications for a creamery and machinery to be used.

MARYSVILLE, CAL.—W. P. Hammon, of the Yuba River Tract Co., states that his company intends to establish machine shops in Maryesville to repair and reconstruct the dredgers now operated by him.

GRASS VALLEY, CAL.—The Edward M. Moyle Engineering & Equipment Co. is preparing plans and specifications for the erection of a large leather making factory at Los Angeles.

EUREKA, CAL.—J. G. Curtis, Levi Smith and others have purchased the Bayside Mill & Lumber Co.'s properties, and it is the intention of the new owners to enlarge the mill on the Eureka bay shore to a considerable extent.

PHOENIX, ARIZ.—The Automatic Car Fender & Railway Supply Co., capital stock $150,000, has been chartered. Incorporators: J. T. Rice, W. I. Rice and J. Overholt.

HULL, QUE.—Walters & Son are asking exemption from taxation on a proposed addition to their axe factory, to be 40 × 100 ft.

MONTREAL, QUE.—The Canada Car Co., capital $3,000,000, has been incorporated. W. P. Coleman, Pres., announces that an immense plant will be erected at once near Montreal, to be in operation early next summer. The buildings will cover 360,000 sq. ft. The plant running to its full capacity will handle between 500 and 600 tons of material a day, will employ from 1,500 to 2,000 men. It is understood that Grand Trunk Pacific have given assurance of large future contracts.

MEAFORD, ONT.—Clelland & Sons purpose erecting a wheelbarrow factory during the coming year.

MONTREAL, ONT.—The Simplex Railway Appliance Co., City, has purchased 43 acres at Lachine and will build large car works, employing 1,500 men and containing 15 buildings.

MISCELLANEOUS CONTRACTS.

WHARF.—Bracebridge Ont.—Contract for construction of wharf has been let to J. H. Baker for $8,200.

ELEVATOR.—Cambridge City, Ind.—E. A. Grubbs Co. is having plans prepared, according to reports, for erection of large elevator.

WHARF.—Seattle, Wash.—Moran Bros. Co., Seattle, according to reports, are preparing to build a new 600 ft. long, 60 ft. wide wharf.

TELEPHONE SYSTEM.—Coeur d'Alene, Idaho.—Interstate Telephone Co. has applied for franchise to construct telephone system in this city.

WHARF.—Martinez, Cal.—Selby Smelting & Lead Co. has applied for franchise to construct a wharf on southern shore of Straits of Carquinez.

WHARF.—Campbellton, N. B.—C. J. B. Simmons, Fredericton, N. B., was awarded contract for Government wharf at this place to cost $36,000.

DOCK.—Cleveland, O.—Board Public Service has let contract for building a dock near Columbus St. bridge to Cleveland Trinidad Paving Co., for about $5,040.

DREDGING.—Cleveland, O.—Bids are asked by Board Public Service until Nov. 9 for dredging and excavating new channel of Cuyahoga River. A. R. Callow, Secy.

DREDGING.—New London, Conn.—Henry Du Bois Sons Co., 17 State St., were low bidders at $9,900, Oct. 28, for dredging in New Haven harbor for U. S. Government.

WHARF.—Newport, R. I.—It is likely that special election will be held to vote on bond issue for improvement of Long Wharf. It is thought that work will cost about $200,000.

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ORE STEAMER.—Cleveland, O.—Cleveland Iron Works Co. has let contract to Great Lakes Engineering Works, Detroit, Mich., for 10,000-ton ore steamer, to cost $410,000.

LEVEE WORK.—Alton, Ill.—Charles Mulvihill, Alton, has been awarded $80,000 contract for reconstruction of the Cloteau levee.

CLEARING AND GRADING.—Portland, Ore.—Contract for clearing and grading timber land at Fort Stevens, Ore., has been let to Loren Seward, 461 Pres. St., Portland, Ore., for $11,065.

CANAL.—New Iberia, La.—Contract for constructing drainage canal from this city to Vermillion Bay, bids for which were opened Oct. 10, is stated to have been let to F. S. Hoyt, Alexandria, La., for $61,000.

DREDGING.—New York, N. Y.—Bids are asked by Commissioner Docks, Pier A, Battery Pl., until 2 p. m., Nov. 11 for about 20,000 cu. yds. dredging at Chelsea, of North River. Maurice Featherson, Comr.

CONDUIT.—Milwaukee, Wis.—Chas. J. Poetsch, City Engr., has commenced plans for new conduit at pumping works in the 18th Ward. Est. cost is $6,000, and it is expected that contracts will be let about Jan. 1.

PIER.—Philadelphia, Pa.—J. E. Brenneman & Co. are stated to have contract for constructing 74 × 336 ft. pier at Delaware River and Point House Road for the Sun-Allen Fertilizing Co. The total cost is $63,500.

CANAL IMPROVEMENTS.—Columbus, O.—State Canal Board, Chas. E. Perkins, Ch. Engr., according to press, will contract Nov. 9 for improvement of Ohio and Erie canal at Akron. Work will involve outlay of $30,000.

FREIGHT ELEVATORS.—Pittsburg, Pa. — Pittsburg Terminal Warehouse & Terminal Co. is stated to have let contract 44 six-story, two-ton capacity freight elevators to the New American Elevator Co., Columbus, O.

GRAVELING TRENCHES, ETC.—Portland, Me.—Contract for graveling trenches, loaming and seeding, clearing and grubbing at Fort McKinley, Me., has been let to T. H. Gill & Co., 31 Milk St., Boston, Mass., for $2,065.

BREAKWATER.—Ottawa, Ont.—Bids are asked by Fred Gennas, Secy. Dept. Pub. Wks., Ottawa, until Nov. 1 for constructing breakwater at eastern entrance of harbor at St. Peter's Bay, Kings County, P. E. I.

PIER WORK, ETC.—San Francisco, Cal.—Atlantic Gulf & Pacific Co. has contract for reconstruction of steel pier of Olympic Salt Water Co. Contract amounts to about $15,000 and is said to include installation of larger intake pipe.

TELEPHONE IMPROVEMENTS.—Pine Bluff, Ark.—Southwestern Telegraph & Telephone Co., according to reports, will spend $100,000 in this city in erecting new building and putting all wires underground in main section of city.

WHARVES.—San Diego, Cal.—Hugh T. Richards has applied to City Council for franchise to construct two wharves at foot of H St. The plans contemplate construction of wharves about 1,000 ft. long, with 200 ft. of water between them.

OIL PIPE LINE, WHARF.—Vallejo, Cal.—Portland Cement Co. has secured right of way from its works at Napa Junction to tide water for a pipe line which it proposes to lay for conducting oil to its works. A wharf will be built and some dredging done.

UNDERGROUND CONDUIT SYSTEM.—Boston, Mass.—Bureau Yards and Docks has let contract for underground conduit system at Boston Navy Yard, bids for which were opened Oct. 22, to Metropolitan Contracting Co., 95 Milk St., Boston, for $8,300.

CEMENT.—Washington, D. C.—Isthmian Canal Commission has awarded contract for 2,400 bbls. Portland cement, bids for which were received Oct. 20, to United Building Material Co., Park Row Bldg., New York, for $4,536. Cement is to be delivered at Colon.

WINDOW AND DOOR SCREENS.—Prescott, Ariz.—We are informed that all proposals for window and door screens received by the Quartermaster at this post in response to advertisement dated Aug. 3, 1904, have been rejected, and the matter will be readvertised.

SUBWAY.—Chicago, Ill.—According to a recent statement of Alderman Milton J. Foreman, Chn. Council Transportation Committee, work will be started before April, 1905, on a subway system for this city. A fund of $2,000,000 is already available for beginning the work.

WHARFS.—San Francisco, Cal.—Plans have been completed for the two wharfs which the Harbor Commissioners will construct for the Pacific Mail Co. The new structures are each to be 650 ft. in length and 140 ft. in breadth and one of them will be a double-deck affair.

SUBWAY.—Rochester, N. Y.—State Railroad Commission has approved plans for Union St. subway, as modified by R. A. Fisher, Cy. Engr., and it is expected that the contract will be let soon. New York Central R. R. is to pay half the cost, the remainder being paid by city and state.

LEVEE WORK.—New Orleans, La.—New Orleans Levee Board rejected all bids Oct. 19 for levee work in Third District. For this work Acme Lumber Co., at $5,793, was low bidder for furnishing lumber, and J. H. Gardner Construction Co. at $15,134, was only bidder for construction work.

DAM.—Boise, Idaho.—Barber Lumber Co. is stated to have let contract for construction of dam to Faris-Keal Construction Co., the lumber company to furnish all material. The contract involves about $25,000, and total cost of work is estimated at about $100,000. A. P. Ingalls is Engr. in charge.

COAL TESTING PLANT.—Fort Myer, Va.—Following bids were received by Capt. G. C. Barnhardt, Q. M., U. S. A., Oct. 17, for constructing coal testing plant at this place: W. H. McCray, Washington, D. C., $4,125; Thomas H. Lyons, Washington, D. C., $4,256; Charles J. Cassidy, Washington, D. C., $4,686.

BRICK ARCH.—Marion, O.—Contract for constructing Blaine Ave. Ditch will be let at public outcry beginning at 1 p. m., Nov. 10, at the office of H. H. Noyes, County Surv. The work consists of the construction of 1,900 lin. ft. single ring, 3 ft. inside diameter and 2,272 lin. ft., double ring, 3½ ft. inside diameter, brick arch, in city of Marion.

SPIRAL OBSERVATION TOWER.—San Diego, Cal.—Daniel E. Gordon, C. E., and C. Q. M., at Fort Rosecrans, has obtained from the Portland exposition management a concession of land, on which to operate, in 1905, his newly invented spiral tower. The tower will cost $40,000 and will be constructed chiefly of Oregon pine with metal supports.

BOILER.—Reading, Pa.—Following bids were received by John F. Ancona, County Controller, Oct. 28 for tubular boiler for Berks County Almshouse: Reading Scale & Machinery Co., Reading, Pa., $2,298; Lebanon Boiler Works, Lebanon, Pa., $2,380; John H. Seibert, Reading, Pa., $2,245; Geo. C. Wilson & Co., Reading, Pa., $3,100; Kutztown Foundry & Machine Co., Kutztown, Pa., $2,327.

TELEPHONE SYSTEM, PIPE LINE.—Santa Barbara, Cal.—Adolph Phillips has applied to County Supervisors for franchise for telephone system and crude oil pipe line.

STEAMSHIP REPAIRS.—Seattle, Wash.—Moran Bros. Co., Seattle, have been awarded contract, at $100,000, for repairs and changes in Pacific Coast Steamship Co.'s steamer "Santa Rosa." The boat is to be changed from a double to a single smokestack vessel and the four double end boilers changed to single end boilers of same capacity. The high pressure cylinder will also be altered.

TELEPHONE WORK.—Brownwood, Tex.—New company, at the head of which is J. G. Watkins, Fort Worth, Tex., is to take over local telephone exchange at this place and at Goldthwaite, Coleman and Ballinger and 350 miles of long distance lines. It is stated that extensive improvements will be made, including installation of central battery system in each town and construction of new long distance lines.

LEVEE WORK.—Conway, Ark.—Directors of Levee District No. 1, J. E. Little, Pres., and J. W. James, Secy., are stated to desire correspondence with parties who will submit bids on the following work: A levee about five miles long and consisting of about 80,000 cu. yds.; a lock and flood gate, requiring about 700 cu. yds. of concrete. Plans and specifications will be furnished on application to above parties.

TUNNEL.—Following bids were received by Boston Transit Commission Oct. 27 for constructing Sec. 1 of Washington St. subway: Jones & Meehan, 1 Beacon St., Boston, $82,858; P. McGovern, $99,774; Coleman Brothers, $113,768; E. W. Everson & Co., $159,450; Charles F. Taylor & Co., $153,225; Manufacturers' Contracting Co., $123,346; Metropolitan Contracting Co., $172,863; H. P. Nawn, $117,787; J. J. Coughlan, $147,530; Gow & Palmer, $141,343.

TUNNEL.—Boston, Mass.—Bids are asked by Boston Transit Commission, 15 Beacon St., Boston, B. Leighton Bell, Secy., H. A. Carson, Ch. Engr., until Nov. 17 for building Sec. 2 of the Washington St. Tunnel from near the southerly side of Eliot and Kneeland Sts. to near the northerly side of Boylston St. This section is the portion of the Boylston St. station, which provides for southbound cars, and it includes a platform. (Advertised, Engineering News.)

WHARF, DREDGING, ETC.—Newport, R. I.—Following bids were received by Bureau Yards and Docks Oct. 29 for constructing timber wharf and buildings, and doing incidental dredging, grading, etc., at Government Landing, Newport: Darling & Slade, 56 North Main St., Fall River, Mass., $22,465; J. K. Sullivan, 60 Pelham St., Newport, R. I., $31,572; Roy H. Beattie, 57 North Main St., Fall River, Mass., $25,600; William H. Ellis, 17 Milk St., Boston, Mass., $36,886; Frank Pidgeon, 139 Main St., Saugerties, N. Y., $31,489.

MOTOR DRIVE OUTFITS, PUMPS, ETC.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts until Nov. 15 for furnishing at the Navy Yards, Norfolk, Va., Charleston, S. C., and Port Royal, S. C., a quantity of motor drive outfits for Bement-Miles horizontal punch, insulators, conduit, dynamo cable, fire brick, building brick, Portland cement, granite paving blocks, Weinland water power tube cleaners, Davidson & Worthington steam pumps, motor driven service pumps, double acting pumps, etc. H. T. B. Harris, Paym.-Gen., U. S. A.

LUMBER, FLAT CARS, STEAM SHOVELS.—Washington, D. C.—Isthmian Canal Commission has let contracts for furnishing 2,600,000 ft. of lumber, bids for which were opened Oct. 6, as follows: Bellingham Bay Co., San Francisco, Cal., 2,100,069 ft.; Continental Lumber Co., Houston, Tex., 500,000 ft. On Oct 25 the Commission awarded a contract for furnishing 200 flat cars, f. o. b. New York, to the Standard Steel Car Co., Pittsburg, Pa., for $875 each. A contract for furnishing steam shovels was let to the Bucyrus Co., Milwaukee, Wis., for $117,750.

DAM AND LOCK.—Boston, Mass.—Plans and specifications for the construction of the Charles River Dam and Lock are now nearing completion, and it is intended to advertise for bids in two or three weeks. The approximate quantities of the principal items involved are: Earth excavation, 340,000 cu. yds.; additional material required for filling, 400,000 cu. yds.; concrete masonry, 41,000 cu. yds.; stone masonry, 2,800 cu. yds.; piles, 490,000 lin. ft.; long leaf yellow pine lumber, 1,100,000 ft. B. M.; spruce lumber, 550,000 ft. B. M. This work is to be done by the Charles River Basin Commission, 367 Boylston St., Boston, Mass. Hiram A. Miller, Ch. Engr.; William S. Youngman, Secy.

BOILERS, ETC.—West Point, N. Y.—Advices from Washington state that the Secretary of War has rejected all bids received by the Quartermaster, U. S. A., West Point, Aug. 9 for boilers, pumps and machinery for the new power plant at that place. New specifications are to be prepared and bids will be soon asked under the revised specifications. At the Aug. 9 opening of bids the following proposals were received for the boilers: Aultman-Taylor Co., $36,684; A. D. Granger, $35,879; Motley, Green & Co., $41,400; Heine Safety Water Tube Boiler Co., $32,800; Abendroth & Root, $30,798; Babcock & Wilcox, wrought steel, $38,250; cast steel, 160 lbs. pressure, $32,750; The Stirling Co., $30,000.

DRY DOCK.—San Francisco, Cal.—Bids were received by Bureau Yards and Docks, Oct. 29, for completion of dry dock at Mare Island, Cal., Navy Yard. Bids were taken on the following items: (1) Price for the completion of the work if allowed use of machinery, tools, appliances, and plant, now on site of work, provided for use in prosecution of work by original contractors; (2) Price for all the machinery and work of installation connected therewith; (3) Price for all work other than that set forth in item 2 above, if allowed the use of machinery, etc., as per item 1; (4) Price for the completion of the work without being allowed the use of machinery, etc., as per item 1; (5) Price for all the machinery and work of installation connected therewith, called for under item 2, without being allowed the use of machinery, etc., as per item 1; (6) Price for all work other than that set forth in item 2 above, without being allowed the use of machinery, etc., as per item 1: The bids received were as follows: Scofield Co., 21 Park Row, New York, (1) $1,385,000; William N. Concanon, 207 Crossley Bldg., San Francisco, Cal., (1) $1,420,000, (4) $1,495,000; Healy, Tibbitts & Co., 22 Market St., San Francisco, Cal., (1) $1,387,000, (3) $1,150,000, (4) $1,452,000, (6) $1,215,000; Burrell Construction Co., Central Bank Bldg., Oakland, Cal., (1) $1,645,000, (2) $290,000, (3) $1,445,000, (4) $1,675,000, (5) $300,000, (6) $1,495,000.

STEEL CASTINGS, LINKS, ETC.—Washington, D. C.—Bids are asked by the Isthmian Canal Commission, J. G. Walker, Chn., until Nov. 19 for furnishing steel castings, links, etc. The articles are classified as Class "A" and "B," and those required under Class "A" are as follows: One excavator sprocket casting and 60 steel castings for same. The above material is intended for repairs and maintenance of excavator now in operation at Culebra, Isthmus of Panama. Under Class "B" the following articles are required: 400 steel links marked A, est. weight, 1,460 lbs.; 200 steel blocks marked B, est. weight, 1,270 lbs.; 400 steel pins (cold rolled) marked C, est. weight, 764 lbs.; 4,800 steel links marked D, est. weight, 5,400 lbs.; 1,200 steel pins (cold rolled) marked E, est. weight, 2,020 lbs.; 1,200 1-in. steel pipe thimbles marked F, est. weight, 600 lbs.; 1,200 lbs. steel washers marked G, est. weight, 200 lbs. The above materials are for use in connection with repairs and maintenance of excavator and link propelling chain, and are to be constructed of steel. Proposals should be submitted in duplicate and marked "Proposals for excavator sprockets, Class A," or "Steel links, etc., Class B," and should state earliest possible date of delivery from factory. Prices should be quoted f. o. b. New York, or delivered at Colon or La Boca. Blue prints for the sprocket castings for excavator and for propelling chain for excavator are on file at office of Engineering News, 220 Broadway, New York.

MINING NOTES.

TUNNEL.—Portland, Ore.—E. A. Session has let contract to Prince & Rehil, Toledo, Ore., for 100 ft. of tunnel work on the Goat Mountain property, in the St. Helens District.

SMELTER.—Grants Pass, Ore.—Local reports state that the management of the Alameda mine in the Galice District contemplates building a smelter as soon as development work warrants. J. F. Wickham is Mgr.

TUNNEL.—Sumpter, Ore.—Local reports state that L. R. Bellman, Rest. Mgr. of the Cracker Oregon, has awarded a tunnel contract to Joe Bourne, work to commence at once. Contract awarded calls for 100 ft. and at its completion contract for another 100 ft. will be awarded.

MINING EQUIPMENT.—Sumpter, Ore.—It is stated here that the present mill at the Monumental mine, which is arranged for roasting, dry crushing by stamps and reroasting and pan amalgamation, will shortly be almost entirely dismantled and replaced by stamps for wet crushing, plate amalgamation, jig concentration and cyanide. It is said that $60,000 will be expended. C. J. Allen, Portland, Ore., is interested.

MINING MACHINERY.—Utah.—Chas. L. Adams, of Taylorsville, Cal., Supt. of the Regal mine, is reported to be in the market for mining and milling machinery. It is intended to equip the mine with gasoline engine, hoist and pump, after which a ten-stamp mill is to be put in, the plant to include a concentrating table. Power drills will be put in at the mine, and some electrical apparatus and hydraulic piping is wanted also.

MINING EQUIPMENT.—Salt Lake City, Utah.—The "Mining Review" of Oct. 15 contains the following items regarding projected mining development: The Calienta Gold Mining Co., of Caliente, Nev., expects to build a mill in the spring.——Mt. Baldy Mining & Water Power Co., of Marysvale, Utah, will soon put in a gasoline hoist.——S. Gregory, of Reno, Nev., will build a ten-stamp mill for his Cloud Burst mine in Lincoln County, Nev.——The White Rock mine near La Grande, Cal., Chas. E. Hill, Supt., is to have a small experimental reduction plant.——The Adoth Gold Mining Co. of Reno, Nev., Jas. T. Boyd, Pres., may equip its property with a mill in the near future.——The Utah-Apex Mining Co., Salt Lake City, Walter C. Orem, Mgr., will soon equip its Bingham property with a six-drill air compressor.——The Vivian group of mines near Needles, Cal., is to be equipped with a stamp mill. The property is owned by T. and J. Ewing, of San Francisco, Cal.——The Wolverine mines at Hornbeck, Cal., are to be equipped with a stamp mill. G. B. Rymal is Supt.

U. S. POSSESSIONS AND CUBA.

SEA WALL.—Hawaii.—Contract for the construction of the seawall for the slips that the Territorial Government is to construct in the proposed harbor improvements has been let to Lord & Belser for $8,653.

WATER-WORKS.—Camaguey, Cuba.—Rhoade Fisher, Civil Engr., Camaguey, writes us that as soon as the surveys and plans for the water-works for Camaguey are completed full information will be furnished. As stated under Readers' Wants in last week's paper a large quantity of supplies will soon be needed.

COALING STATION, WHARF, ETC.—Ladrone Islands.—Rear-Admiral Manney, Chief of the Bureau of Equipment, Navy Dept., Washington, D. C., in his annual report recommends that a coaling station with a minimum capacity of 20,000 tons be built at Guam, together with a wharf 680 ft. long and a masonry reservoir of 480,000 gals. capacity. The total cost of the work is set at $423,500. It is also recommended that two lighters be provided at Guam.

RAILWAY.—Cuba.—The North Shore Ry. Co., we are informed, has been organized with $2,500,000 capital stock, to build a standard gage steam road. There will be 60-lb. rails and permanent steel bridges. The road is to run, 1st section, from deep water at Marinola Bay to Leando, 20 miles, 2d section, from Leando to Moran, 50 miles; 3d section, from Moran to Caiborien, 55 miles; total, 125 miles. The first section will pass through a rich iron country, and will connect with a branch road at Leando with road to the iron ore mines of Piling & Crane, of Philadelphia. The 2d and 3d sections will pass through a rich agricultural region, traversing the south coast of Cuba. Wharves and terminals will be built at Maraciabo Bay and Caibarien. Preliminary surveys have been made and location surveys will be started in December. Chas. de N. Gibbons, Pres., No. Shore Ry. Co., may be addressed at the Hotel Norman, Camaguey, Cuba.

MEXICO.

RAILWAYS.

CITY OF MEXICO.—The Pan-American R. R. has changed hands and work of construction, from Tonala southward will be pushed at once. Considerable reconstruction on the completed road has been decided on, and permanent steel and stone bridges will replace present structures. David P. Doak, St. Louis, Mo., is Pres.; J. M. Neeland is Vice-Pres. and Gen. Mgr., in charge of the property.

GUERRERO.—Engineers are locating a line of railway in the state of Guerrero, which, with existing lines, will connect the City of Mexico with Chilpancingo and Acapulco. It is said a French company will construct the road. The governor of the state, Manuel Guillen, is encouraging the scheme, and may be addressed at Chilpancingo.

JALISCO.—State legislature has ratified contract entered into between Gov. Ahumada and J. N. Zermena, City of Mexico, and Ernesto Mora, Guadalajara, for construction of first section of the projected Guadalajara and Morelia Railroad. The portion of the line covered by the contract is from Guadalajara to Chapala. The plan is to operate steamers from that point to Tizapan, on the southern shore of Lake Chapala, and to build an electric road from that point to Morelia.

VERA CRUZ.—Pan-American R. R. Co., which owns extensive asphalt deposits at Tantima, Vera Cruz, is arranging to build a railway from that point to near Tuxpam. The length of the road will be about 20 miles.

VERA CRUZ.—It is reported that the Vera Cruz & Pacific Ry. Co. intends to build a branch from its main line to San Juan, the northern terminus of the San Juan branch of the Tehuantepec Ry., which connects with the main line at Juile. Thos. Milan, Orizaba, Vera Cruz, is Pres. and Gen. Mgr.

STREET AND ELECTRIC RAILWAYS.

AGUAS CALIENTES.—The properties of the Electric Street Railway Co. and the Coorcio Street Railway Co. in this city have been merged and it is stated that improvements will be made to the consolidated system.

PARRAL.—The Mexican Government has issued a decree cancelling the concession held by Lorenzo J. Arellano for the construction and operation of an electric street railway system in Parral.

LIGHT AND POWER PLANTS.

ARIO, MICHOACAN.—City Council has entered into a contract with Felipe Alonso for the installation of an electric light and power plant.

AUTLAN, JALISCO.—John Mann and Martin Poe, American mining men who own the Veta Grande mine, situated in the Autlan District, have been granted a concession by the state government of Jalisco for the use of the water from the Ayuquila River for generating electric power to be used in operating reduction works which they will establish near their mine.

CHAPALA, JALISCO.—Carlos Navarro Mora, of Guadalajara, has obtained a concession from the government of the state of Jalisco for the installation of an electric light and power plant at Chapala.

GUAYMAS.—Hon. Ramon Corral, Vice-President of Mexico, City of Mexico, who owns the electric light plants at Guaymas and in the city of Hermosillo, has given orders for extensive improvements to these two plants to be made. The proposed improvements will cost about $50,000.

LAGOS DE MORENO, JALISCO.—An electric light plant is to be installed at Lagos de Moreno, the state legislature having passed a bill exempting the proposed plant from all state taxation for a term of years.

QUERETARO.—The work of utilizing the water of the Tequixquiapam Springs, in the state of Queretara, is being prosecuted. The city of Queretaro is to be lighted by electricity, and power furnished for manufacturing purposes from the power at the springs. H. Alcocer is Engr. in Charge.

SALTILLO.—A number of capitalists of this place are organizing a company to install an electric light and power plant for the city, to be operated in opposition to the plant already established here. The electric power will be generated from a mountain stream near Saltillo.

TAMPICO.—Improvements are to be made to the electric light plant at this place.

VERA CRUZ.—The Mexican Incandescent Lamp Manufacturing Co., City of Mexico, obtained a contract to furnish the electric light plant of this city with 20,000 lamps, to be delivered this year.

BUILDINGS.

CHIHUAHUA.—Governor Luis Torres will erect a large business block here.

CITY OF MEXICO.—Colonel Francisco Ruiz is arranging to have a number of important public improvements made at the suburban city of Tlalpam. These improvements include the completion of the municipal palace at that place.

CITY OF MEXICO.—Residents of the Santa Maria and Nonoalco colonies are planning the construction of a new church at a place called El Crucero. The church will be of a strictly American style, with a capacity to seat about 2,000 persons, and will be called Capilla de Nuestra Senora de Guadalupe.

MONTEREY.—The Cuauhtemoc Brewing Co. will erect an office building to cost $75,000.

Improvements to the Casino Club building are to be made at an estimated cost of $30,000.

A government military hospital is to be erected here at a cost of $45,000.

Fernando Martinez will erect a new residence here to cost $125,000.

WATER-WORKS.

LA PIEDAD, MICHOACAN.—A number of wealthy farmers of this section have made application to Mexican Government for concession to establish a large system of irrigation in the valley of the Lerma River. The water will be obtained from that stream and distributed through the valley by means of canals and ditches.

MATEHUALA, SAN LUIS POTOSI.—The National Metallurgical Co., which is arranging to erect a large smelting plant here has also obtained a franchise from this city to establish a water-works system. The water supply for the smelter and city will be brought from the Jordan River through a pipe line, 35 kilometers long, giving a head of approximately 2,000 ft. and delivering 600 HP. in the dry season and more than 1,000 HP. the balance of the year. The company has acquired a large number of important mines in the Matehuala and surrounding districts.

MONTEREY, MEX.—Mention has been made in these columns at various times of the franchise granted the Monterey Water & Sewerage Co., of which J. D. Stocker, Scranton, Pa., is Pres., for building water-works and sewerage in this city. Further information regarding this project is now at hand, and from it we learn that it has been decided to erect a dam in the canyon Santa Clara in order to form a storage reservoir at a point eight or nine miles from the city, from which the supply will be obtained. A gravity pipe line is to connect this reservoir with a smaller distributing reservoir near the city, from which water will be delivered by gravity. A straight masonry dam about 550 ft. long and 60 ft. high has been decided on. It will be built of concrete with a double facing of rubble. E. Sherman Gould, Consult. Engr., 220 West 57th St., New York, is to design the proposed dam and appurtenances.

LAMPAZOS, NUECO LEON.—General Francisco Naranjo, of this city, is stated to be making good progress with his plans for establishing a large system of irrigation near here. He has obtained the necessary concession from the Mexican Government for the enterprise.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

SANTA EULALIA, CHIHUAHUA.—Governor Enrique Creel has requested the President of Santa Eulalia to provide estimates and plans for a proposed system of waterworks to be established for this city under the auspices of the state government. The proposed system involves the construction of a large dam for impounding the water. At present this city is entirely dependent on surface wells.

MANUFACTURING PLANTS.

CHIHUAHUA.—Juan A. Creel, Mgr. Banco Minero, in this city, and E. Avila, of Monterey, will build a large broom factory here.

CITY OF MEXICO.—Continental Mexican Rubber Co. has been incorporated from Jersey City, N. J., with capital of $100,000, to manufacture and sell rubber, gutta percha, etc. Edward B. Aldrich, 32 Broadway, New York, and James J. Cosgrove, 120 Broadway, New York, are among the incorporators.

PARRAL.—James I. Long, American Vice-Consul at Parral, state of Chihuahua, is reported to have purchased 30,000 acres of timber land in the western part of the state and will erect saw mills, etc., as soon as possible.

QUERETARO.—Arrangements are being made for the establishment of a cement factory in Queretaro. The governor is interested, and has promised to aid the project, both in a personal and official way.

TORREON.—Messrs. Lawrence and Hunicke, of this city, contemplate establishing a factory here for the extraction of lumber from the "guagla" plant.

VERA CRUZ.—The San Juan Co., of the state of Vera Cruz, has ordered two locomotives for immediate delivery from the Davenport Locomotive Works, Davenport, Ia., and considerable other equipment will soon be ordered from the United States. George T. Anderston is the Consult. Engr. of the plantation company.

STREETS AND ROADS.

MAZATLAN.—A large amount of street paving is to be done by this city as soon as the rainy season is over.

VERA CRUZ.—Plans are being considered for paving a number of streets in Vera Cruz with asphalt.

MISCELLANEOUS.

STAMP MILL.—Caborca, Sonora.—The San Blas Mining Co., of Caborca, Sonora, is reported as preparing to build a large stamp mill.

SEPARATING MILL.—Torreon.—The Torreon Smelting Co. will, it is stated, install an electric separating mill at its San Diego mine.

COLONY.—Jalisco, Chiapas.—C. P. Smith, J. C. Haney, of Vernon, Tex., and a number of other capitalists of that section are arranging to establish a large colony near here.

FIRE DEPARTMENT SUPPLIES.—Chihuahua.—This city proposes to establish a fire department, and will purchase a hook and ladder truck, two hose carts, a chemical engine and 3,500 ft. of hose.

AMMUNITION MACHINERY.—City of Mexico.—War Department is considering a project to order some modern machinery for the manufacture of cartridges and other ammunition for the army.

LIGHT-HOUSE.—Topolobampo, Sinaloa.—Department of Communications and Public Works has approved the construction of a light-house at Topolobampo, and work will be commenced at the expiration of the rainy season.

SMELTERS.—Torreon.—The American-Mexican Mining & Development Co., of Chicago, Ill., is planning the construction of a 1,000-ton smelter at Torreon, and another at Velardena, state of Durango, and will also shortly place in order for a 6,000-HP. boiler plant.

OIL FIELD DEVELOPMENT.—Puerto Angel, Oaxaca.—J. L. Grandison, Oaxaca, is at the head of a syndicate which has begun the extensive development of the new oil field at this place. The syndicate are drilling a number of wells. If the output of oil is sufficient to require it large storage tanks will be erected.

TIMBERLAND.—Merida.—Rafael Peon has been granted a concession by the Mexican Government to exploit 700,000 acres of heavily timbered land, situated on the east coast of the new territory of Quintana Roo, which was until recently a part of the state of Yucatan. The concession is for a term of ten years and under its provisions Mr. Peon is permitted to utilize all mahogany and cedar trees of more than two meters in diameter and to pay a fixed price for each tree cut. It is understood that he will establish large lumber mills on the land.

FOREIGN CONTRACTS—EXPORT NEWS.

SANITARY WORKS.—Africa.—Municipality of Loanda, Portuguese West Africa, is considering construction of certain sanitary works at a cost of about $250,000.

ELECTRIC LIGHTING PLANT.—Argentina.—Municipality of Chivilcoy, Province of Buenos Aires, is reported ready for proposals for building electric lighting plant for the town.

TRAINING WALLS.—England.—Town Council of Preston is to consider matter of expenditure of a further sum of $1,000,000 upon the improvement of the Ribble Estuary by the extension of the training walls.

ELECTRIC TRAMWAY.—Spain.—Don José Xinxo has applied to Spanish Government for concession for an electric tramway starting from the Plaza Rovira in Gracia and terminating at San Juan de Horta.

WATER-WORKS.—England.—Corporation of city of Swansea is to apply for sanction to raise $622,500 to complete the Cray water-works, and for power to construct a second line of pipes from the reservoir.

SLATE, MILLBOARD.—South Africa.—The Natal Government, according to reports, intends to offer a reward of $2,500 for the manufacture in the Colony of 150,000 sq. yds. of slate and 150,000 sq. yds. of millboard per year, from Natal asbestos.

TRAMWAYS.—England.—Advices from Liverpool state that application is to be made for powers to construct two tramway routes in Bootle. An inquiry has been held into the application of the corporation for a loan of $2,000,000 in connection with the extension scheme.

ELECTRIC PLANT.—Spain.—Don José Luis Gomez Navarro has applied to Spanish Government for concession to appropriate 10 cu. meters per second of water from the River Segura at Rio Muerto, for the production of electric power to be used for industrial purposes in Murcia and other towns.

RAILWAY WORK.—Norway.—C. W. Adams, Ch. Engr. Standard Construction Corporation, Ltd., Guldsmedvik i Ranan, Norway, writes us that a railway is being built by this company and that it is proposed to install a block signal system for a single-track road. Catalogues, etc., relating to such installations are wanted.

ELEVATED RAILROAD.—Brazil.—A concession has been granted to the Cia Importadora e Introductora of Rio de Janeiro for construction and working of circular elevated railroad. The gage is to be one meter; motive power, electricity; and height of rails at least five meters and not more than 15 meters above the level of the pavement.

READERS' WANTS

This Department contains special requests and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. ENGINEERING NEWS will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, **UNLESS OTHERWISE REQUESTED**, which request will be honored absolutely. The information **in all cases will be sent to our advertisers** handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.

WINDMILLS.—Little Rock, Ark.—Geo. R. Brown, care Bd. of Trade, is in the market for windmills.

GEAR CUTTER.—Cedar Falls, N. C.—The Cedar Falls Mfg. Co. is in the market for a gear cutter and drill press.

STEAM PLOWS.—Egypt.—The Am. Mfrs' Agency, P. O. Box 589, Alexandria, Egypt, is in the market for steam plows.

STEAM ROAD ROLLERS.—Staunton, Va.—H. C. Braxton, Chn. St. Com., is in the market for a steam road roller.

COAL BRIQUETTE MACHINERY.—Dallas, Tex.—H. H. Havenkott wants data relating to coal briquette machinery.

TILES AND METAL CEILINGS.—India.—R. K. Motisban & Co., 9 Love Lane, Bombay, India, are in the market for the above.

TWENTY 40-TON STANDARD GONDOLA CARS.—Roe, W. Va.—The Hughes Creek Coal Co. is reported in the market for the above.

REVOLVING SCREENS, MINE CARS, ETC.—Crossville, Tenn.—J. N. Baker is in the market for the above for improvements to a coal mine.

10-TON STEAM ROAD ROLLER.—Valdosta, Ga.—A. W. Vamedoe, Cy. Clk., is understood to be in the market for a 10 or 12-ton steam road roller.

CHARCOAL FURNACES.—Birmingham, Ala.—W. M. Drennen is understood to be in the market for eight charcoal furnaces, to have a capacity of 600 lbs. of wood.

COAL MINING EQUIPMENT.—Cleveland, O.—The Mohawk Smokeless Coal Co., Williamson Bldg., is in the market for all lines of equipment for its coal mining plant.

ELECTRICALLY DRIVEN MACHINE TOOLS.—Vienna, Austria.—Ranoche & Anders, Wienstrasse 45, Vienna, is in the market for the above; especially hammers for working castings.

BRICK MAKING MACHINERY.—Jackson, Miss.—The Jackson Brick Co. is in the market for a 40-HP. boiler, small steam shovel for clay work, and other machinery for a brick making plant.

CRUSHED GRANITE.—Jersey City, N. J.—Jas. P. Hall, foot of Henderson St., writes us that he wants the names of firms selling crushed granite and similar material used in the making of concrete blocks.

MINE LOCOMOTIVE.—Williamson (Mingo Co.), W. Va.—H. M. Payne, Engr., writes us that he wishes to buy a 40-in. gage (outside) haul locomotive for one of the mines for which he is chief engineer.

PARQUET FLOORS, WALL PAPER, BUILDING MATERIAL, TILING, ROOFING, CEILINGS, ETC.—Mexico.—We are informed that Pablo Solis, State Engr. and Arch., Mexico City, is in the market for the above.

PUMPING ENGINES.—England.—Francis R. Hope Res. Engr., Font Reservoir, Rothbury, Northumberland, writes us that he is in the market for pumping engines capable of pumping 10,000 gallons hourly against 150 ft. head.

BELT CONVEYORS, ETC.—New York, N. Y.—L. C. Miller, C. E., 1 Madison Ave., informs us that he wishes catalogues from firms making belt conveyors, as applied to coal pockets of 1,200 tons capacity. There will be concrete-steel construction.

DREDGING CONTRACTORS.—Princeton, N. J.—U. Strassburger, care Thos. Meehan & Sons, Engrs., Princeton, writes us that he wants to get into communication with contractors having experience in the hydraulic dredging of salt marsh land, along Long Island Sound, N. Y.

CONTRACTORS' SUPPLIES.—Columbus, O.—Chas. J. Close, General Contractor, 404 Harrison Bldg., writes us that he has just established an office to undertake construction work, and wants to receive catalogues from firms manufacturing or handling tools and machinery pertaining to his business.

CUSTOM CRUSHING AND GRINDING.—Tottenville (S. I.), N. Y.—M. J. House, care of the Tottenville Copper Co., writes us that he wishes to get into communication with firms near Tottenville, who do custom rock crushing and grinding. It is desired to crush and grind a large quantity of stone to 60 mesh.

ALCOHOL ENGINE.—Camaquey, Cuba.—In connection with the proposed water-works for Camaquay, noted elsewhere, we are informed that information is wanted regarding alcohol engines, as it is intended to install one of 1,500,000 gallons capacity per 24 hours. Address catalogues, etc., to Rhode Fisher, Jr., C. E., Camaquey.

OIL BURNER.—Reidsville, N. Y.—H. B. Sproul, care Jos. Walker, Contractor, Reidsville, writes us that he wishes to be placed in communication with firms making equipment for oil burning attachment for a locomotive boiler of 80 HP. Should it proof satisfactory he will eventually equip three other boilers—two of 25 HP. and one of 50 HP.

ONE 300-HP. COMPOUND CORLISS ENGINE, TWO 75-TON COMPRESSORS, DIRECT-CONNECTED CORLISS TANDEM ENGINES, ONE 200-KW. GENERATOR, FOUR 200-HP. WATER TUBE BOILERS.—Modesto, Cal.—O. McHenry, of the O. McHenry Co., writes us that he is in the market for the above mentioned supplies, for the proposed cold storage plant.

ELECTRIC RAILWAY.—Switzerland.—The Swiss Federal Assembly has been considering granting a concession for the construction and working of a narrow gage electric railway from Sierre to Inden or Rumeling, to a syndicate formed by MM. O. Zen-Ruffinen and H. Gentinetta, of Louèche, and three other gentlemen. The capital to be raised for this purpose is fixed at about $400,000.

RAILWAY.—Peru.—A ministerial decree was issued Sept 9 regarding the possibility of finding a suitable point for the terminus of a proposed railway in the eastern regions of Peru, a link of the great Pan-American project. The decree provides for the organization of a new commission of engineers to make preliminary surveys along the following routes: From Cerro de Pasco to Huánuco, following the course of the River Huallaga up to its junction with the Tulumaya at a short distance below the Tingo Maria, and afterwards ascending the course of the said affluent up to its source, and finally crossing the "divortium aguarum" so as to arrive at the sources of the Agunytico, an affluent of the Louri Ucayali, and descending it until reaching its outlet; and the ordering that the respective studies be made regarding the navigability of the River Pachitea along its whole course by one of the commissions already gone forward.

RIVER IMPROVEMENT.—China.—It is stated that eventually Shanghai will cease to be a shipping port unless something is done to remove the Woosung bars and conserve the Huangpu River generally. The Pekin correspondent of the London Times is of the opinion that arrangements for doing this work will be effected on the following basis: "China will ask the Powers to agree to a new protocol regarding the Shanghai conservancy in substitution for the terms of the old protocol. China will undertake to complete the work herself without any contribution from Foreign Powers. She will present a definite scheme; will appoint an engineer, whose name is to be approved by the Powers; will pledge as security the opium revenues of Sze-chuan province and Suchau prefecture; and will formally undertake that, if the work is not completed according to the terms of the new protocol, the Powers may revert to the terms of the old protocol and may go to work on the lines therein indicated, performing the work without a Chinese representative should China still refuse to nominate one. There is no reason to doubt that now that England and America are acting in conjunction the scheme can be carried to completion."

HARBOR IMPROVEMENTS.—Chili.—B. Polanco Guzman, Civil Engineer, P. O. Box 671, Valparaiso, writes us that important works have been projected for the improvement of the harbors of Valparaiso and Talcapuano. The work at Valparaiso is stated to be by far the most important engineering work of any kind undertaken in South America, its estimated cost reaching $17,000,000. Bids will probably be asked at the end of the year, as soon as the Senate has approved some modifications introduced in the original plan, which includes the construction of several breakwaters and docks. The work at Talcapuano is of the same nature, but on a smaller scale, its estimated cost being about $2,000,000. Bids for this latter work were to be opened about the end of October. Our correspondent states that the designs for the work are due to Jacob Krauss, Director of the Polytechnic School of Holland. The kind of construction adopted is that of large steel concrete caissons, some of them 20 meters long. These are to be floated to that part of the dock for which they were designed and will be sunk by filling. The caissons will be of variable lengths, but each one will be of the total cross sections and heights of the breakwater at that point. Mr. Guzman thinks it would be worth while for American firms to interest themselves in this work, details of which could be obtained by application to the Direccion General de la Armada, Valparaiso, the Director de Ibras Publicas, Santiago, or Mr. Guzman himself would be willing to obtain data and forward it to any interested parties.

Write our advertisers when you intend to buy your supplies and machinery for improvements, or for carrying out your contracts. If you do not find what you want in our advertising pages write us for list of firms, and we will put you in communication with them at once.

RAILWAYS, POWER PLANTS, ETC.—Argentina.—Our correspondent in Buenos Aires has sent us the following information concerning work projected in that part of South America.

Electric Tramway.—Argentina.—The National Tramway in La Plata, the property of Luis Monteverde, is to be electrified.

Electric Tramway.—Argentina.—The Buenos Aires Municipality has granted a concession to Messrs. Sawyer and Lacase for an electric tramway connecting up the western suburbs. The concession is for 55 years, after which it becomes the property of the corporation.

Railway Line.—Argentina.—The bill authorizing the government to construct a railway line from Clodomira to La Bauda has been definitely sanctioned.

Railway.—Argentina.—The Government of the Province of Buenos Aires has granted a concession to Messrs. Pacheco and Anchovena to construct and work a light railway, meter gage, from Dolores to Samborombon Bay. The work to commence within a year, and be finished 18 months afterwards. The capital has been fixed at $8,000 gold per kilometer; the distance is about 42 kilometers.

Hydraulic Works.—Argentina.—The contract between the Hydraulic Works Board and Messrs. Nocetti & Co., of Buenos Aires, for the construction of works at the port of Concordia, at a cost of $553,720, paper, has been approved.

Cars, Trucks, etc.—Argentina.—The Ministry of Public Works has approved the contract between the Ways of Communication Board and Paul R. Bader, of Buenos Aires, for the provision of cars, vans, trucks and repair pieces for the Central Northern Railway.

Irrigation Works.—Argentina.—It is understood that Governor Tello, of Rio Negro, has suggested to the government the advisability of undertaking certain irrigation works at Roca for the development of agricultural interests in that district. Attending this suggestion the executive is preparing a bill for Congress asking for a credit of $450,000 to carry out the works.

Tramways.—Argentina.—A favorable report has been presented by the sub-committee of Municipal Public Works on Rural Tramway (Buenos Aires) petition for conversion of traction power to electricity.

Electric Lighting.—Paraguay.—A project has been presented to the Asuncion authorities by Señor J. Lapido, of Montevideo, for the lighting of that city by electricity.

ELECTRIC TRAMWAY.—Shanghai, China.—Our correspondent, who is traveling around the world, writes us as follows from Shanghai regarding the proposed electric tramway for Shanghai, bids for which are to be opened on March 31, 1905, as advertised in Engineering News of

Oct. 20: "I am sending you a map and pamphlet about a 24-miles system of street railroad to be constructed in Shanghai. Keep the map and pamphlet on file for any one who is interested. The pamphlet is a reprint of a contract with the Brush Electric Co., of London, who refused to proceed with the work for some reason, not stated to me. I have been over the route of the lines and there are no difficulties whatever in the way of construction. There is little if any variation in the level from one end of the line to the other. Power plant could be established on the Woosung River shore line, or possibly Suchow Creek. The Bubbling Well Road, Nankin Road and Broadway and Seward Road lines would receive much travel from both foreign and native residents. Two classes of car will be required, and the motor car could be arranged for first and a trailer for second, or a class for natives. The Broadway line would catch all the travel to and from the boats (war vessels) anchored in the lower part of the river. It is improbable that the first class traffic would be profitable, and the remuneration from the lines must come from native travel. There are between 7,000 and 8,000 foreign inhabitants only, mostly English, with Germans next. It is not necessary that the exact conditions of the pamphlet be adhered to. Any plans and bids submitted will be acted upon. I am told that Hong Kong has a system recently constructed that is a paying investment. The trolley lines of Tokio, Japan, are, I am told, profitable; at any rate, the system in Tokio is well patronized at all hours of the day, and entirely Japanese patronage. Fares there are but 3 cts. Japanese (1½ cts. gold) for all routes and transfers. I traveled fully 9 miles for the 1½ cts., and probably by a proper understanding of routes and transfers I could have traveled twice the distance for the one fare. There is a chance here to bid on this work by American contractors; whether anything can be done further is a question. It might perhaps be well to state that there will probably be extensions of the line made later on, and this initial contract will probably control all future work in street railroad construction in Shanghai. Practically all the cars could be built in Shanghai, and all materials supplied here excepting electric equipment. Labor is cheaper, although very slow. It would require the personal examination of all the conditions by an expert electrical engineer. The pamphlet gives the name of the English expert who reported twice on the work. Perhaps his report could be obtained." Fearon, Daniel & Co., 96 Wall St., New York, are the American representatives for the foreign settlement at Shanghai." The proposal advertisement referred to above will appear Nov. 3-17, Dec. 1-15 and 29.

CONTRACT PRICES.

BRICK PAVING.—Guthrie, Okla.—Bids were received by City Clerk Oct. 13 for paving several alleys with double coursed vitrified brick, on a 4-in. sand foundation; curb is to be of stone. Guarantee is five years. W. S. Gamble, Acting Cy. Engr. Bids were as follows; (1) Chas. T. Derr, Guthrie, Okla. (awarded contract); (2) Leavitt & Wall, Guthrie, Okla.:

		(1)	(2)
Earth excavation	420 cu. yds.	....	$.25
Paving	2,205 sq. yds.	$2.04	1.98
Curb	80 lin. ft..	.65	.65
Header plank, per ft.	1,180 ft.....	.15	.25

EXCAVATION, MASONRY, ETC.—Ithaca, N. Y.—The following bids were received here Oct. 20 for constructing an electric railway; (1) Vermilye Construction Co., New York; (2) C. R. Lewis, Ilion, N. Y.; (3) Frank Pidgeon, Saugerties, N. Y.:

Bids received at Ithaca, N. Y., Oct. 20, for constructing electric railway.

Items.	Quantities.	(1)	(2)	(3)
Clearing and grubbing	1 acre.....	$150.00	$500.00	.....
Earth excavation	17,000 cu. yds.....	.50	.35	.40
Rock	2,000 " "	1.25	1.35	1.58
Concrete culvert masonry	450 " "	6.00	7.00	7.89
24-in. sewer pipe, laid	200 lin. ft.....	2.00	1.70	2.85
Track complete	2.2 miles.....	11,100.00	.....	.....
Lumber for crossings	4,000 ft. B.M.....	40.00	.....	.....
No. 2 feeder wire	2 miles.....	600.00	.....	.....
Overhead construction	62½ miles.....	1,600.00	.....	.....
Excavation	19,000 cu. yds.....	.....	.85	.....
Loose rock		.....	.....	1.00

LEVEE WORK.—New Orleans, La.—State Board of Engineers opened bids, Oct. 20, for about 400,000 cu. yds. levee work. Following bids were recommended for acceptance: Devil's Flat, Plaquemines Parish, 20,000 cu. yds., Joseph Hingle, 14 2-3 cts. per cu. yd.; Long Point Levee, Caddo Parish, 50,000 cu. yds., S. R. Bobbit, 14.40 cts.; Magnolia Levee, Caddo Parish, 30,000 cu. yds., Epple & Hayes, 14.40 cts.; Lower Cross Keys Levee, Caddo Parish, 25,000 cu. yds., Epple & Hayes, 14.40 cts.; in Bossier Levee District, on Red River, Jeter Levee, 60,000 cu. yds., W. G. Burt, 13.90 cts.; Red River, Atchafalaya and Bayou Boeuf Levee District, enlargement of levee from Sandusky to Cummings Point, 45,000 cu. yds., S. R. Bobbit, 17.25 cts.

EXCAVATION, ETC.—Sacramento, Cal.—County Supervisors have awarded contract for reconstructing and cleaning out old drainage canal from Y St. to Snodgrass Slough, about 20 miles, to the Bay End River Dredging Co., at the following bid: Ordinary earth excavating, 17¾ cts. a cu. yd.; hardpan, 29 cts. a cu. yd., including the replacing of bridges and removal of brush; new lumber, $36 per thousand feet.

DREDGING.—New London, Conn.—Following bids were received by Lt.-Col. Chas. F. Powell, U. S. Engrs., for about 100,000 cu. yds. dredging in New Haven Harbor: Columbia Dredging Co., 64 Broad St., New York, 15 cts.; J. S. Packard Dredging Co., 425 Angell St., Providence, R. I., 11.89 cts.; Du Bois Bros. Dredging Co., 19 Whitehall St., New York, 14.4 cts.; Henry Du Bois Sons' Co., 17 State St., New York, 9.9 cts.; Emory R. Seward, 1027 Macy Pl., New York, 16 cts.

PAVING.—Austin, Tex.—Bids were received Oct. 25 for paving Congress Ave. for a length of 3,000 ft., and for a width of 90 ft. The foundation is to be of 6-in. concrete and a rock curb is to be constructed. The work requires 10,000 cu. yds. earth excavation and 30,000 sq. yds. paving. The bids considered by the Council were as follows: Brown & Dabney, Dallas, Tex., excavation, 45 cts.; vitrified brick paving (no time guarantee), $1.90. Trehrman & Co., Austin, Tex., excavation, 52 cts.; rock asphalt paving (10 years' guarantee), $1.90. John B. Hawley, Fort Worth, Tex., was Consult. Engr.

ENGINEERING MATERIAL PRICES.

These prices will appear in the first or second issue of each month.

TRACK FASTENINGS—

Chicago—at mill—Steel splice or angle bars, 1.30 to 1.35 cts.; spikes, 1.60 to 1.65 cts.; bolts, square nuts, 2.20 to 2.25 cts.; hexagon nuts, 2.30 to 2.40 cts.

RAILS, STEEL—

New York—at mill—New standard sections, $28; light rails $19.50 to $20 at mill; old iron, f. o. b. New York, $15.50 to $16; old steel, f. o. b., rerolling lengths, $13 to $13.50; old steel, short pieces, $11.50 to $12; relayers, $16 to $17.

Chicago—at mills—New, $28, standard sections; light rails, $20 to $22; old iron, $17.50 to $18; old steel, 4 ft. and over, $13 to $13.50; old steel, less than 4 ft., $11.50 to $11.75; heavy relayers, $20.50 to $21.50; heavy relayers, for site tracks, $19 to $20.

Pittsburg—at mill—Standard sections, $28.

STRUCTURAL MATERIALS—

New York—at tidewater—Beams, channels, angles and zees, 1.54½ to 1.80 cts.; tees, 1.59½ to 1.80 cts.; bulb, angles and deck beams, 1.64½ to 1.85 cts.

Chicago—I-Beams and channels, 3 to 15-in., inclusive, and angles 3 to 6-in., ¼-in. and heavier, 1.56½ cts. Store prices, angles, beams, channels and zees, 1.80 to 1.90 cts.; tees, 1.85 to 1.95 cts.

Pittsburg—Beams and channels, up to 15-in., 1.40 cts.; over 15-in., 1.50 cts.; angles, 3 × 2 × ¼-in. thick up to 6 × 6-in., 1.40 cts.; angles, 8 × 8 and 7 × 3½ ins., 1.50 cts.; zees, 3-in. and larger, 1.40 cts.; tees, 3-in. and larger, 1.45 cts.

PLATES AND SHEETS—

New York—at tidewater—Sheared plates, carload lots, tank, 1.54½ to 1.65 cts.; flange, 1.64½ to 1.80 cts.; marine, 1.74½ to 1.90 cts.; fire box, 1.74½ to 2.50 cts.

Pittsburg—Tank, ¼-in. thick 6¼ to 24-in. wide, 1.30 cts. at mill, Pittsburg; flange and boiler steel, 1.40 cts.; marine and ordinary fire box, 1.50 cts., at mill, Pittsburg; locomotive fire box, 1.80 cts.

MERCHANT STEEL—

Chicago—Machinery, smooth finished, 1.71½ to 1.76½ cts.; tire, smooth finished, 1.66¼ to 1.71½ cts.; open hearth spring, 1.85 to 1.90 cts.; crucible tool, 6½ to 8 cts.; special tool, 13 cts. and up.

Pitsburg—Crucible tool steel, ordinary grades, 5½ to 7 cts.; 8 to 15 cts. for special grades; tire steel, 1.50 cts.; sleigh shoe, flat, 1.40 cts.; cutter shoes, tapered and bent, 1.90 to 2 cts.; open hearth spring steel, 1.85 to 2 cts.

IRON—

Pig Iron:

New York—at tidewater—No. 1 Northern Foundry, $15.25 to $15.75; No. 2 X Foundry, $14.75 to $15.25; Gray Forge, $12.75 to $13; Tennessee and Alabama brands, $14.75 to $15.75, for No. 2 Foundry, and $14.25 to $15.25 for No. 3 Foundry.

Chicago—f. o. b., Chicago—Lake Superior Charcoal, $15.50 to $16; Northern Coke Foundry, No. 1, $15 to $15.50; Northern Coke Foundry No. 2, $14.50 to $15; Northern Coke Foundry, No. 3, $14 to $14.50; Northern Scotch, No. 1, $15.50 to $16; Ohio Strong Softeners, No. 1, $15.80 to $16.30; Ohio Strong Softeners, No. 2, $15.30 to $15.80; Southern Silvery, according to Silicon, $16.40 to $16.90; Southern Coke, No. 1, $15.65 to $16.15; Southern Coke, No. 2, $15.15 to $15.65; Southern Coke, No. 3, $14.65 to $15.15; Southern Coke No. 4, $14.40 to $14.65; Southern Coke, No. 1 Soft, $15.65 to $16.15; Southern Coke, No. 2, Soft, $15.15 to $15.65; Southern Gray Forge, $14.15 to $14.65; Southern Mottled and White, $13.40 to $14.15; Malleable Bessemer, $14.50 to $15; Standard Bessemer, $15.25 to $15.75; Jackson County and Kentucky Silvery, 6 to 10% silicon, $18.30 to $19.30; Alabama Basic, $15.15 to $15.65; Virginia Basic, $15.15 to $15.65.

Pittsburg—Bessemer at Valley furnace, $12.75 to $13; Foundry iron, Northern No. 2, $13.50, at Valley furnace; $14.35 at Pittsburg.

Cast-Iron Pipe:

New York—Carload lots, gross tons, 6 to 10 ins., at tidewater, $25 to $25.50; 12 ins. and up, $24 to $25.

Chicago—4-in. water pipe, $25.50; 6-in. and heavier, $26.50, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—

Asphaltum:

Ventura and other California asphalts, $21 per ton at New York; Trinidad refined, $25 per ton; Venezuela asphalt, $26 to $27 per ton.

Cement:

Rosendale, in wood, 80 cts.; Portland, domestic, $1.38; Portland, Atlas, $1.60 to $1.70; Portland, Dragon, $1.60 to $1.70; Vulcanite, $1.55 to $1.70.

Copper:

Lake, 13.62½ to 14 cts.; electrolytic, 13.62½ to 13.87½ cts.; casting, 13.37½ to 13.62½ cts.

Lead.

New York, spot, 4.40 to 4.45 cts.

Spelter:

New York, spot, 5.35 to 5.40 cts.

Tin:

New York, spot, 28.75 to 29 cts.

LUMBER—

New York, wholesale prices:

Piling—Spruce, ordinary cargoes, 5 to 6 cts.; oak, 14-in. butt, 40 to 50 ft., 19 cts.; 50 to 55 ft., 22 cts.; 55 to 60 ft., 23 cts.; 60 ft and up, 25 cts.; pine, 60 to 65 ft, $8.50; 65 to 70 ft., $9.50; 70 to 75 ft., $10.50; 80 ft. and up, $16.

Railroad ties—Yellow pine, 6 × 9 ins. × 8 ft., 58 to 60 cts.; 6 × 8 ins. × 8 ft., 53 to 55 cts.; 7 × 9 ins. × 8 ft., 62 to 64 cts.; 7 × 8 ins. × 8½ ft., 57 to 59 cts.; 7 × 9 ins. × 8½ ft., 64 to 66 cts.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

INDUSTRIAL NOTES.

OUR READERS are requested to send short notes regarding new contracts that they are about to award, or have secured, for our news columns. Changes in firms' names and addresses are also wanted. "Write-ups" will not be inserted under any circumstances, as notes must contain news of interest to our readers. If our readers are in the market for any kind of machinery, tools, etc., we shall be glad to send them names of responsible firms making what they want.

W. & L. E. GURLEY, Troy, N. Y., announce that for nearly sixty years, they have been making field instruments for civil engineers and land surveyors, and are now making physical and scientific instruments, and standard weights and measures for schools and colleges as well as for special work.

THE CUMMINGS FILTER CO., room 300 Lewis Block, Pittsburg, Pa., announces that the Cummings Filter Co. has been reorganized and the active management of the company is now in the hands of Messrs. G. L. Bayley, Secretary, and C. L. Wooldridge, General Manager. J. H. Fertig, President; W. S. Bell, Vice-President.; C. G. Carter, Treasurer.

THE PENNSYLVANIA R. R. CO., Philadelphia, Pa., is reported to have let contracts to the American Car & Foundry Co., Pressed Steel Car Co., Standard Steel Car Co. and the Cambria Steel Co., for the construction of 6,200 new freight cars. The company has appropriated more than $6,000,000 for these cars. The new cars will have a capacity of 100,000 lbs. each, and will have steel underframes. Recently the company has been destroying its small cars, since the large steel cars are much stronger and can stand the wear and tear more than they formerly could.

ARTHUR KOPPEL, 66 Broad St., New York, announces that Mr. Ernst Wiener, of the above firm, has just returned from a three months' trip to Europe. He reports that general business conditions in Germany are very good. While abroad he made arrangements which will enable him in future to furnish any of the standard styles of railway materials made by the firm from a stock kept in this country. He also perfected a system whereby orders which call for special manufacture can be shipped promptly. In this way such difficulties as the firm has had in the past from delays in filling orders, will be entirely obviated.

THE B. F. STURTEVANT CO., Boston, Mass., states that the increasing demand for mechanical draft continues, not only in the United States but in other countries. The power plant for the new shops of the Mexican Central Railway Co., at Aguascalientes, Mexico, contains a Sturtevant induced draft apparatus consisting of two steel plate fans, each driven by a Sturtevant vertical engine. Each fan is capable of maintaining a draft pressure in the flue connection of each boiler equal to ⅝ of an inch of water when handling all the gases of combustion burning 35,000 lbs. of coal per hour with a flue temperature of 600°F. The ring oiling fan bearings next to the fan are water-jacketed to prevent over heating. A counterbalanced sliding damper permits either fan to be cut off from the flues or both may be operated at the same time. The engines are provided with regulating valves which automatically control the steam pressure.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

ENGINEERS' GLOVES.—J. P. Luther Glove Co., Berlin, Wis. Paper, 3½ × 6 ins.; pp. 16; illustrated.

Description and prices are given of special leather gloves for the use of engineers, horsemen, etc. Leggings and belts are also listed.

ROCK DRILLS.—J. Geo. Leyner Engineering Works Co., Denver, Colo. Paper; 3½ × 6 ins.; pp. 21.

This is a detail record of work done by two Water Leyner rock drills in the Central Tunnel at Idaho Springs, Colo., from July, 1903, to June, 1904.

ELECTRIC HOISTS AND WINCHES.—C. W. Hunt Company, 45 Broadway, New York. 6¾ × 9 ins.; pp. 20.

This catalogue describes the essential features of electric hoists and their advantages. The company makes a series of electric hoisting machines, from 5 to 200 HP., with drums proportioned to suit wire or manila rope of various sizes.

STEAM VALVES.—Chapman Valve Manufacturing Co., Indian Orchard, Mass. Paper; 6 × 9 ins.; pp. 24; illustrated.

A partial list of users of this company's valves for high and low pressure and for superheated steam is presented in this catalogue. A variety of steam valves is shown by the illustrations.

WATER-SEALED VALVES.—The Wellman-Seaver-Morgan Company, Cleveland, O. 6 × 9 ins.; pp. 12.

Water-sealed reversing valves made under the Forter patent, are described and illustrated. These valves are used on gas, heating, glass, open-hearth and crucible furnaces, over 900 now being in use; and a long list of users is given.

HORIZONTAL AND VERTICAL ENGINES.—American Blower Company, Detroit, Mich. 7 × 8½ ins.; three pamphlets; pp. 60.

The engines illustrated in these catalogues are specially designed for operating blowers. Photographs and line cuts illustrate the engines, and tables give the horse power, prices and other data.

ROOFING FELT AND PITCH.—Barrett Manufacturing Company, New York and Chicago. 5 × 8 ins.; pp. 20.

This is the quarterly "review" published by the Barrett Manufacturing Company, setting forth the merits of the roofing materials manufactured by this firm. It contains a large number of illustrations of buildings in which their roofing material has been used, followed by letters of recommendation.

CONCRETE BLOCK MACHINES.—Pettyjohn Bros., 1200 N. First St., Terre Haute, Ind. Paper; 5½ × 8½ ins.; pp. 20; illustrated.

These are molding machines for making plain and ornamental building blocks. The construction and operation of the machines are described, and there are illustrations of structures built of the blocks.

MEASURING TAPES AND RULES.—The Lufkin Rule Company, Saginaw, Mich. 4 × 6 ins.; pp. 64.

Steel measuring tapes in all sizes, surveyors' chain tapes, linen tapes, steel rules, folding pocket rules, hickory board rules, log rules, log calipers, etc., form the subject matter of this catalogue; illustrations, brief descriptions and price lists being given for each type of tape or rule.

DRY KILNS.—The A. H. Andrews Company, Chicago, Ill. 6 × 8 ins.; pp. 64.

Kilns for drying lumber, and mechanical appliances to be used in and about kilns, are illustrated in this catalogue. Transfer cars, turn tables, piling trucks, etc., are fully illustrated, accompanied by many letters of recommendation.

CENTRAL STATION HEATING.—Evans Almirall & Co., 281 Water St., New York city. Paper; 4 × 8 ins.; pp. 21; illustrated.

The Evans exhaust hot water heating system, with forced circulation was installed not long ago at the Boston Navy Yard. This pamphlet contains a description of the system reprinted from the "Engineering Record."

COAL-HANDLING MACHINERY.—C. W. Hunt Company, 45 Broadway, New York. 5½ × 7 ins.; pp. 48.

This catalogue illustrates and describes coal-hoisting elevators, boom towers, clam-shell buckets, bucket conveyors, coal tubs, cable railways, hoisting engines, coal valves, coal screens and chutes, beside many other accessories that are used in handling, loading and weighing coal.

BLAST HOLE DRILLERS.—The Cyclone Drilling Machine Company, Orrville, O. 6 × 9 ins.; pp. 20.

This interesting catalogue describes the "Cyclone" driller, designed for drilling vertical blast holes up to any depth desired. The machine is a modified well-driller that has been exceedingly effective in railroad work in Pennsylvania and Ohio. Line cuts and photographs show the machine in detail.

STEEL BUILDINGS AND BRIDGES.—McClintic-Marshall Construction Company, Pittsburg, Pa. 6 × 9 ins.; pp. 40.

This pamphlet illustrates and describes a number of large foundries and machine shops built by this company, such as the foundry of the Ingersoll-Sergeant Drill Company at Phillipsburg, N. J., and the machine shop of the Wellman-Seaver-Morgan Engineering Company at Cleveland, O.

ADDRESSING MACHINES.—The Addressograph Co., Chicago, Ill. Paper; 4¾ × 8 ins.; pp. 16; illustrated.

This pamphlet describes an envelope addressing machine, a combined addressing machine and card index, a machine for duplicating letters, and a machine for sealing envelopes. These machines are used by railway and commercial companies, publishers, etc., where it is necessary to write the same addresses quarterly or oftener.

FIRE EXTINGUISHER.—The Fyricide Manufacturing Company, 44 Murray St., New York. 4½ × 7 ins.; pp. 24.

Fyricide, as it is called, is a dry powder put up in 3-pound packages, in a lead-coated metal tube 2 ins. in diameter by 22 ins. long. It will not freeze, and its gases can be inhaled without fear of harm. The catalogue contains a large number of letters of recommendation from a long list of purchasers.

WOOD-WORKING MACHINERY.—Oliver Machinery Co., Grand Rapids, Mich. Paper, 6 × 9 ins.; pp. 213; illustrated.

This is an elaborate and comprehensive catalogue and price-list of wood-working machinery and mill supplies. Several varieties of band and circular saws, lathes, trimmers, etc.; also, machines for pattern making, cutting moldings, and other special work. The supplies include grinding machine, gluing machinery, benches, tools, etc.

WIRE ROPE TRAMWAYS.—A Leschen & Sons Rope Company, St. Louis, Mo. 6 × 9 ins.; pp. 32.

A number of excellent photographs show the Leschen wire rope tramways applied to different uses. The advantages of aerial transportation are thoroughly presented and the general methods of construction are outlined. In fact, this catalogue would serve as an excellent manual for an engineering student who desires to acquaint himself with the principles of aerial transportation.

CONCRETE CONSTRUCTION.—The Engineering Company of America, 74 Broadway, New York. 6 × 9 ins.; pp. 20.

This neatly prepared pamphlet illustrates a variety of concrete structures, both by photographs and by line drawings. An interesting diagram is given showing the production of Portland cement in the United States since 1890. The advantages of plain and reinforced concrete are set forth, and certain of the elementary principles involved in concrete fabrication are elucidated.

DRYERS.—Ruggles-Coles Engineering Company, 39 to 41 Cortlandt St., New York. 6 × 9 ins.; pp. 30.

Line cuts and photographs, accompanied by descriptive text, give an excellent idea of the construction of the dryers made by this firm. The dryer is cylindrical in form, and is supported by eight bearing wheels which are readily adjustable, so that there is no tendency for the cylinder to ride either up or down on the wheels during its revolution. It is claimed that nearly 90% of the theoretical value of the fuel is utilized in the drying.

GASOLINE LOCOMOTIVES AND GASOLINE COMBINATION PASSENGER CARS.—Prouty-Pierce Locomotive Mfg. Co., 605 Adams St., Kansas City, Kan.

We have several times pointed out in this journal the great field which exists for motor cars for handling light passenger traffic. The advantages of the gasoline motor for this work in eliminating the boiler and the smoke from the combustion of coal are evident enough. While several inventors and manufacturers have attempted to produce a successful gasoline locomotive or motor car, this company, we believe, is the first to actually put such a thing on the market.

The pamphlet gives very limited information regarding the apparatus. We learn, however, that the motor is kept in continuous operation and power is transmitted to the driving axle by means of the "Prouty Improving Reversable Clutch," which not only starts and stops the car, but enables it to run in either direction.

CONDENSING MACHINERY.—Dean Bros. Steam Pump Works, Indianapolis, Ind. Paper; 6 × 7 ins.; pp. 56; illustrated.

Both jet and surface condensers are included in this catalogue and also air and vacuum pumps and cooling towers. Half tone and line drawings are used. Among the line drawings is one illustrating the refrigerating tower built by Dean Bros. at Kane, Ill., in 1903. This, the catalogue states, was the first cooling tower constructed in the United States.

BLAST HOLE LOADERS.—Cope & Cornelius, Orrville, Ohio. 5¾ × 7 ins.; pp. 12.

This catalogue illustrates and describes a device for loading powder into blast holes that have been sprung. The device is essentially a long tube, provided with a powder reservoir at the top. The tube is also used for placing the exploder after the hole has been charged. By the use of the device, no powder is lost on the sides of the hole, and clogging in damp holes is made impossible, thus saving the powder and avoiding danger of accident.

SEWAGE WORKS APPLIANCES.—The Patent Automatic Sewage Distributors, 4 Westminster Palace Gardens, Westminster, London, S. W., England. (1) The Candy-Whittaker Sprinklers: Paper; pp. 4; illustrated. (2) Patent Storm Overflow Regulator: Paper; pp. 4; illustrated. (3) Ventilating and Draining Tiles for Filter Beds: Card; 10 × 6 ins.

The Candy-Whittaker sewage sprinkler consists of a series of radial perforated arms, attached to a central revolving cylinder and shaft, the whole driven by the head of the sewage itself on the reaction principle. Mercury is used both as a seal and to enclose the lower bearings. The upper bearings are enclosed in a sealed oil bath. Thus friction and loss of head are reduced to a minimum. Fixed sprinklers are also made.

The patent storm overflow apparatus can be adjusted to divert a given proportion of storm flow from sewage disposal works or to a storm overflow whether or not the sewage is treated. A grooved cam plate, revolving once in 24 hours, is combined with a gate and a weir.

The ventilating and draining tiles for sewage filter beds are made to form both semi-circular and triangular inverted channels. The triangular or V-shaped tiles are 12 ins. wide and 6 ins. high in the clear and are ingeniously formed of two pieces for each length of tile.

BRIDGE.

Eau Claire, Wis., Oct. 24, 1904.

Sealed proposals will be received by the undersigned, endorsed "Proposals for Barstow Street Bridge," until 6 p. m., December 7, 1904, for a two-span plate girder bridge, with masonry or concrete substructure, and for a double arch concrete-steel bridge, complete, in accordance with plans and specifications on file in the office of the city clerk, Eau Claire, Wis.

Plate girders to be 90 feet over all, arches to be 82 feet in the clear and both to be 77° skew bridges.

Bids will be received for substructure, superstructure or complete bridge of either style.

A certified check, made payable to the City Treasurer, of 5% of the amount bid, or cash to the same amount, must accompany each proposal as a guarantee of good faith, and the successful bidder will be required to furnish a bond, satisfactory to the city, in a reliable surety company licensed to do business in the State of Wisconsin, in the amount of 50% of the contract.

Plans and specifications may be seen at the office of the city engineer, City Building Eau Claire, Wis., and a limited number of sets of plans and specifications may be obtained from the city engineer upon deposit of $10.00, which sum will be returned upon the return of said plans and specifications in good condition.

The right is reserved to reject any and all bids. J. HENNESSEY,
18-2teow City Clerk.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 31, 1904.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 15th day of December, 1904, and then opened, for the construction complete of the U. S. Post Office at Norristown, Pa., in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Postmaster at Norristown, Pa., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 18-2t

TUNNEL.

Boston, Mass.

NOTICE TO CONTRACTORS.—Sealed bids for building Section 2 of the Washington street Tunnel from near the southerly side of Eliot and Kneeland streets to near the northerly side of Boylston street will be received by the undersigned at 15 Beacon street, Boston, Mass., until 12 o'clock m. of Thursday, November 17, 1904. Plans can be seen and specifications and forms of contract can be obtained at 15 Beacon street, 5th floor. The right to reject any and all bids, and to award the contract as is deemed to be for the best interest of the City of Boston, is reserved. By order of the Boston Transit Commission, B. LEIGHTON BEAL, Secretary. 18-2t

SOMERSET RAILWAY EXTENSION.

On Dec. 1, 1904, the Somerset Ry. Co. will let about nine miles of railway construction, including tracklaying. Work to be begun on or before May 1, 1905, and to be completed by Oct. 15, 1905. Approximate quantities as follows:

Clearing	110 acres
Grubbing	15 acres
Earth excavation	70,000 cu. yds.
Loose rock	9,000 " "
Solid rock	12,000 " "
Pile bridges	800 lin. ft.
Timber culverts	200,000 ft. B.M.

The right is reserved to reject any or all bids, or any part of any bid. For further information address W. M. Ayer, Manager, Oakland, Me. Maps, plans, profiles and specifications may be seen at the office of the Chief Engr., H. F. Hill, Bingham, Me. 18-4t

U. S. ENGINEER OFFICE, Army Building, New York, Oct. 29, 1904.—Sealed proposals for furnishing material and building a brick repair shop at Fort Totten, N. Y., will be received here until 12 m., Nov. 29, 1904, and then publicly opened. Information on application. W. L. MARSHALL, Lieut.-Col., Engrs. 18-4t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 31, 1904.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 14th day of December, 1904, and then opened, for the construction complete of the U. S. Post Office, Court House and Custom House of Biloxi, Miss., in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Postmaster at Biloxi, Miss., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 18-2t

DEPARTMENT OF COMMERCE AND LABOR, Light-House Establishment.—Sealed proposals will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 12 o'clock m., Thursday, Dec. 1, 1904, and then opened, for furnishing the materials and labor of all kinds necessary for the erection and delivery of the Pecks Ledge Light-House, Cockenoe Island Harbor, Conn., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to LIEUT.-COL. WM. T. ROSSELL, Corps of Engineers, U. S. A., Engineer. 18-2t

DEPARTMENT OF COMMERCE AND LABOR, Light-House Establishment.—Sealed proposals will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 12 o'clock m., Thursday, Dec. 1, 1904, and then opened, for furnishing the materials and labor of all kinds necessary for the completion and delivery of the metal work of the Pecks Ledge Light-House, Cockenoe Island Harbor, Conn., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to LIEUT.-COL. WM. T. ROSSELL, Corps of Engineers, U. S. A., Engineer. 18-2t

SITUATIONS OPEN

(Received on Wednesday, too late for classification.)

WANTED.—Structural draftsmen for general detailing and calculation of bridge stresses. Give experience, references and salary expected. Address "B. A. 18" Engineering News, New York. 18-1t

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